

ENVIRONMENTAL ASSESSMENT,
REGULATORY IMPACT REVIEW,
AND
FINAL REGULATORY FLEXIBILITY ANALYSIS
FOR A FINAL RULE
TO
REDUCE DISCARDS OF, AND
MODIFY THE TARGET CATCH REQUIREMENTS FOR
PELAGIC LONGLINE VESSELS RETAINING INCIDENTAL CATCH OF
ATLANTIC BLUEFIN TUNA

United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Sustainable Fisheries
Highly Migratory Species Management Division

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Reduce Discards of, and Modify the Target Catch Requirements for Pelagic Longline Vessels Retaining Incidental Catch of, Atlantic Bluefin Tuna

Final Action: Reduce discards of, and modify the target catch requirements for pelagic longline vessels retaining incidental catch of, Atlantic bluefin tuna (BFT).

Type of statement: Environmental Assessment, Regulatory Impact Review, and Final Regulatory Flexibility Analysis

Lead Agency: National Marine Fisheries Service (NMFS): Office of Sustainable Fisheries (F/SF)

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Abstract: In April 1999, NMFS adopted a Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (HMS FMP), that was developed to meet the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). One of the issues discussed during development of the HMS FMP was dead discards of BFT by pelagic longline vessels, which may not target BFT but sometimes catch them while fishing for swordfish or other tunas. Pelagic longline vessels are authorized to keep some BFT depending on the amount of target catch they have on board. To reduce BFT dead discards, the HMS FMP included a final action to close an area off the Mid-Atlantic coast to pelagic longline fishing during the month of June. Also considered in the development of the HMS FMP were adjustments to the regulations on how much target catch longline vessels must retain per trip in order to land the BFT they catch, although the HMS FMP did not amend these regulations. This action amends the HMS FMP implementing regulations to reduce dead discards by modifying the target catch requirements and is taken under the framework provisions of the HMS FMP. Specifically, this action modifies the target catch requirements such that pelagic longline vessels must land 2,000 lbs. of other fish in order to land one BFT on a trip, 6,000 lbs. of other fish in order to land two BFT on a trip, and 30,000 lbs. of other fish to land three BFT. This change in the target catch requirements would be applied to all fishing areas. This action also maintains separate quotas for the seasonal

fisheries but would adjust the Longline category North/South division line to 31°00' N. latitude and adjust the Longline category subquotas to allocate 60 percent to the southern area and 40 percent to the northern area. Several other alternative modifications to the target catch requirements were considered but are not preferred. Finally, this action provides NMFS the inseason authority to modify the BFT retention limits for pelagic longline vessels by number from a range of zero (closure) to three BFT per trip and/or by weight within 25 percent of the target catch requirement. These actions are consistent with the objectives of the HMS FMP and the requirements of the Magnuson-Stevens Act.

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1.0 Purpose and Need for Action

The purpose of this action is to reduce the level of BFT that is discarded dead by vessels in the Atlantic pelagic longline fishery while allowing the retention of incidentally caught BFT and preventing a directed fishery on BFT. One of the goals of the HMS FMP, consistent with National Standard 9 of the Magnuson-Stevens Act, is to minimize bycatch and bycatch mortality in the highly migratory species (HMS) fisheries. The EA, Regulatory Impact Review (RIR), and Final Regulatory Flexibility Analysis (FRFA) analyze several alternatives to achieve this goal, including the adjustment of target catch requirements for landing the incidental catch of BFT by pelagic longline vessels.

The Atlantic pelagic longline fishery, which commonly targets swordfish, sharks, and yellowfin and bigeye tunas, also occasionally catches BFT incidentally to these other fisheries. Because the U.S. longline fleet has not historically targeted BFT, the portion of the U.S. national BFT quota allocated to the longline category has always been intended to account for incidental catch only. Accordingly, under current BFT regulations, vessels permitted in the Atlantic tunas Longline category are permitted to retain and land BFT caught with pelagic longline gear only if a specific minimum level of other fish species are landed from the same trip. While the regulations pertaining to landing incidental BFT catch have been adjusted on several occasions, the pelagic longline industry continues to comment and data suggest that the target catch requirements result in unnecessary dead discards, while the quota allocated to account for these incidental catches remains unused. The history of U.S. regulatory activity and public comment regarding this issue dates back to the early 1980s. A full description of this history is provided in the HMS FMP in Chapter 3, section 3.5.3 “Management Measures to Address Bycatch Problems,” and is also described below in Section 1.1 and recent HMS SAFE Reports (NMFS 2002 and 2003).

The HMS FMP includes a suite of management objectives for all of the HMS Fisheries. The following objectives are particularly pertinent to this rulemaking on the BFT target catch requirements for longline vessels:

- ▶ Consistent with other objectives of this FMP, to manage Atlantic HMS fisheries for continuing optimum yield so as to provide the greatest overall benefit to the Nation, particularly with respect to food production, providing recreational opportunities, preserving traditional fisheries, and taking into account the protection of marine ecosystems. Optimum yield is the maximum sustainable yield from the fishery, reduced by any relevant social, economic, or ecological factors;
- ▶ To minimize, to the extent practicable, bycatch of living marine resources and the mortality of such bycatch that cannot be avoided in the Atlantic HMS fisheries;
- ▶ To minimize, to the extent practicable, economic displacement and other adverse impacts on fishing communities during the transition from overfished fisheries to healthy ones;

- To better coordinate domestic conservation and management of the fisheries for Atlantic HMS, considering the multispecies nature of many HMS fisheries, overlapping regional and individual participation, international management concerns, historical fishing patterns and participation, and other relevant factors.

A change to the target catch requirements for BFT in the pelagic longline fishery is consistent with the above objectives established by the HMS FMP, the Magnuson-Stevens Act National Standards and National Standard Guidelines, and the International Commission for the Conservation of Atlantic Tunas (ICCAT) recommendation to rebuild BFT in the western Atlantic Ocean. In this EA/RIR/FRFA, NMFS considers the biological, social, and economic impacts of a range of management measures to reduce dead discards of BFT in the pelagic longline fishery (based on reviews of landings, logbook, and observer data) with the objectives of allowing the retention of truly incidentally caught BFT while preventing a directed fishery and reducing discards. A preferred alternative is identified for which NMFS is publishing regulations, in accordance with the National Environmental Policy Act (NEPA) and other applicable laws. This alternative is preferred due to its consistency with the objectives of the HMS FMP, the Magnuson-Stevens Act, and the 1998 ICCAT recommendation for western BFT stock rebuilding.

1.1 Regulatory History

In 1977, NMFS implemented an incidental catch limit of BFT for all gear types (other than Traps that could land one BFT every 30 days) that caught BFT but were not part of a directed bluefin fishery (42 FR 30373, June 14, 1977). This regulation required that fishermen could only retain BFT if they participated in a non-directed fishery and if the weight of the BFT on board was less than one percent of the weight of all the fish on board.

During the 1980 winter/spring longline fishery in the Gulf of Mexico, a number of U.S. longline vessels fishing for swordfish began to land increasing quantities of giant BFT. NMFS was concerned that without immediate action there could be substantial investment in fishing gear and processing facilities by the U.S. industry in developing a directed longline fishery for BFT in the Gulf of Mexico, a known spawning area for BFT. There was also concern that, under the regulations at the time, longline catches could severely and negatively affect the other fisheries in the Gulf of Mexico and Mid-Atlantic areas. As a result of these concerns, NMFS published a final rule dated January 26, 1981 (46 FR 8012), which prohibited the use of longlines in a directed BFT fishery, implemented an incidental catch limit of BFT, and established two management areas north and south of 36° N. latitude where different catch limits would apply. South of 36° N. latitude, longline fishermen were restricted to two BFT per vessel per trip, whereas north of 36° N. latitude, they were restricted to two percent by weight of all other fish on board at the end of the fishing trip (weigh-out facilities in the southern area were deemed inadequate to allow practical application of the two percent rule).

In 1982, ICCAT recommended a ban on directed fishing for BFT in the Gulf of Mexico

to protect the spawning stock. This action primarily affected Japanese longline fishermen in the area, as U.S. longline gear had already been prohibited from targeting BFT in the Gulf of Mexico. However, concern remained over the adequacy of the incidental catch limits, particularly regarding the efficacy of the restriction at reducing bycatch mortality of BFT. NMFS' examination of available longline fishery data at that time (i.e. during the late 1970's and early 1980's) regarding discarded BFT in the Gulf of Mexico revealed that more than 80 percent of those BFT released were dead.

In 1983, in an attempt to accommodate the expansion of the Atlantic and Gulf of Mexico longline fishery, NMFS increased and then subdivided the incidental BFT quota for longline fishermen (48 FR 27745, June 17, 1983).

On January 6, 1992 (57 FR 365), NMFS determined that the incidental catch limit in the southern area was not effective at reducing BFT bycatch mortality and changed the restriction for this area. Until that time, the bycatch restriction of up to two BFT per trip, without any requirement that the BFT be landed in conjunction with other species, and the short distance from shore to the fishing grounds, made it feasible for vessels to direct their fishing on BFT, despite the retention limit. As this activity ran counter to the intent to prohibit directed fishing of BFT by longline gear, the final regulations required longline vessels operating in the southern area (south of 36° N. latitude) to land, offload and sell at least 2,500 lbs. of other species as a condition for landing a maximum of one BFT.

After this action was implemented, NMFS received several comments indicating that the new bycatch restriction in the southern area caused an increase in BFT discards and waste. Consequently, NMFS conducted scoping meetings on this issue and examined several options that included: 1) requiring special gear; 2) requiring a minimum number of days between a vessel's landings; and 3) reviewing the minimum target catch requirements. Recommendations also included prohibiting BFT catches in the Gulf of Mexico or, conversely, working through ICCAT to rescind the prohibition and allow limited directed fishing.

On January 19, 1994 (59 FR 2814), NMFS proposed to amend the minimum landing requirements to adjust for seasonal variation in the target fisheries. At that time, NMFS maintained that it was possible to conduct directed fishing on species other than BFT with only a limited amount of BFT catch, and that requiring threshold amounts of BFT to be landed ensures that bluefin are harvested only as bycatch incidentally to fishing for other species. However, NMFS also stated in this *Federal Register* notice that "if evidence indicates this is not true, NMFS may consider more stringent measures, such as area or season closures or gear restrictions, in future rulemaking." On April 14, 1994 (59 FR 17723), NMFS published a final rule that changed the directed fishery minimum weight requirement on landing one BFT, for the southern area only, from at least 2,500 lbs. to 1,500 lbs. during the months from January to April, and to 3,500 lbs. from May through December. In that final rule, the existing catch restrictions were not adjusted for the northern area.

At the same time that NMFS modified the target catch requirements for the southern area,

NMFS also modified the geographic separation between the northern and southern management areas by adjusting the dividing boundary south to 34° N. latitude (59 FR 17723, April 14, 1994). This was primarily because the previous location at 36° N. latitude was located in a particularly dynamic oceanographic area where vessels fishing on one side of the line may find themselves transported by currents to the other side. This division line adjustment prompted comments regarding division of quota and specification of landings requirements affecting the northern and southern subcategories of the incidental longline category.

In addition, NMFS received numerous written comments that the landings requirements applicable in the northern area cannot be met by vessels in the shark longline fisheries operating off of North Carolina in the winter months, due to the retention limits in effect under the shark fishery management plan. Participants in this winter shark fishery have noted that the BFT and shark regulations, taken together, force discarding of BFT, e.g., the 4,000 lb. dressed weight large coastal shark retention limit allows retention of an 80 lb. BFT, which is below the minimum commercial size. These fishermen requested an allowance to land and market fish that would otherwise be discarded dead, thus increasing boat revenues without contributing to additional BFT mortality. Also, despite these ongoing efforts to reduce discards by changing target catch requirements and adjusting dividing lines, U.S. BFT dead discards increased in 1995 to a total of approximately 142 mt.

In response to these comments, and the relatively high number of discards reported to ICCAT, NMFS undertook a review of the BFT incidental catch regulations, including division of the quotas, the position of the dividing line between the northern and southern subcategories, and landing criteria applicable to each management area. Observer data from longline trips taken from 1991 to 1994 indicated that two or fewer BFT were hooked on 91 percent of all observed trips. NMFS also analyzed landings information to determine trends in landings by time and area. NMFS published the results of its review in an Advanced Notice of Proposed Rulemaking (ANPR), published on September 17, 1996 (61 FR 48876).

In the ANPR, NMFS requested public comments on possible changes to the regulations to reduce incidental mortality of BFT while allowing for commercial use of unavoidable bycatch. Various proposals were presented and several public comments were received during the comment period on the ANPR. Many of the proposals called for various changes to the target catch limits and/or moving the dividing line between management areas while other comments raised concern over providing an incentive for a directed fishery and advocated use of time/area closures to address the problem of discards.

In response to the 1996 ICCAT recommendation that called for the United States to adopt measures designed to reduce discards of BFT during 1997 and 1998, and since publication of the ANPR and receipt of comments, NMFS examined different options for reducing dead discards. NMFS considered a variety of options, including changing the current target weight requirement, limiting the number of days per trip, and implementing time/area closures. Logbook and dealer weighout slips from 1991 through 1995 were collected, and initial results indicated significant differences between the number of BFT caught and discarded per trip by season and region.

Analyses of BFT discard data continued through 1998, the preliminary results of which were presented to the HMS and Billfish Advisory Panels (APs) in March and July 1998. The 1998 ICCAT Recommendation on western BFT requires that all Contracting Parties, including the United States, minimize dead discards of BFT to the extent practicable. The Recommendation also established a 79 mt allowance for dead discards for the western Atlantic, of which the United States was allocated 68 mt. If a country has dead discards in excess of their allowance, they must be counted against that country's landing quota for the following year. If there are fewer dead discards, then half of the underharvest may be added to the following year's quota while the other half is conserved. Dead discards of BFT are reported to ICCAT by NMFS, along with landings data, and are summarized in the U.S. National Report which is transmitted to ICCAT annually.

The final rule that implemented the HMS FMP in 1999 addressed the dead discard issue by establishing a time/area closure for the use of pelagic longline gear in the Northwestern Atlantic from 39° to 40° N. latitude and 68° to 74° W. longitude during the month of June (See Figure 1). This closed area was chosen to meet the goal of minimizing BFT dead discards while having the least economic impact on the directed pelagic longline fisheries. The HMS FMP also considered, but did not implement, further modifications to target catch requirements because of the difficulty in determining catch levels and landings allowances that would likely reduce dead discards. The lack of correlation between the level of target catch and BFT discards indicated that BFT catches were truly incidental, and while an area closure was selected in the HMS FMP as the most expedient means of reducing dead discards, NMFS also concluded that future analyses of catch rates may provide guidance for a change in the target catch requirements. This EA/RIR/FRFA includes these analyses and the methodology is described in Section 4.0. Since NMFS first implemented BFT incidental catch regulations, the agency has received public comment and inquiries regarding the target catch requirements to retain incidental catch of BFT and the effectiveness of the regulations in avoiding dead discards.

Since adoption of the HMS FMP and its measures to reduce dead discards of BFT, the target catch requirements for retention of BFT by pelagic longline vessels have continued to be discussed. Industry has continued to comment that the target catch requirements are overly restrictive and result in unnecessary dead discards of BFT. NMFS analyzed additional data on the landing patterns of longline vessels, and published another ANPR in the *Federal Register* on November 17, 2000 (65 FR 69492). The members of the HMS and Billfish APs discussed the target catch requirements at their meetings in April 2001 and 2002, and were generally in favor of NMFS adjusting the target catch requirements so that pelagic longline vessels could land more of the BFT they caught incidentally to fishing for other species, so long as the changes to the target catch requirements did not result in an incentive to target BFT and/or cause additional dead discards. See Appendices 1 and 2 for summaries of the APs' discussions of the target catch requirements.

On December 24, 2002 NMFS published a proposed rule (67 FR 78404) to address ongoing issues with dead discards and retention of BFT by pelagic longline vessels and analyzed various alternatives for the rulemaking in an accompanying draft EA/RIR and Initial Regulatory

Flexibility Analysis (IRFA). The analyses considered three approaches to address the purpose and need of the action including; (1) adjusting target catch requirements for bluefin retention by pelagic longline vessels, (2) moving the north/south division line between management areas and reallocating quota between areas, and (3) providing inseason adjustment authority for target catch requirements. NMFS selected preferred alternatives that best addressed the original need for the action and were consistent with the purposes of the HMS FMP and the requirements of the Magnuson-Stevens Act. For any of the alternatives, and consistent with ICCAT's recommendation regarding dead discards (see above), if NMFS determines that the United States' annual dead discard allowance has been exceeded, NMFS would subtract the amount in excess of the allowance from the total amount of BFT that can be landed in the next year. If NMFS determines that the annual dead discard allowance has not been reached, NMFS may add one half of the remainder to the total amount of BFT that can be landed. Public comment on the rulemaking was generally favorable and encouraged the Agency to proceed expeditiously to final action. Several comments also suggested some minor adjustments to the proposed regulations to more effectively meet the purposes of the rulemaking. A summary of all comments received and agency responses are provided in the preamble to the final rule.

The HMS AP met in February 2003 and provided comment and advice to the Agency on a number of management issues including the subject of BFT discards and retention limits by pelagic longline vessels, the recently published proposed rule and associated public comments. HMS AP members reiterated many of the same comments raised during the public comment period on the proposed rule and also encouraged the Agency to proceed to final rulemaking. See Appendix 3 for a brief summary of the APs' comments on the Agency's approaches and preferred alternatives to address discards of BFT by the pelagic longline fishery.

1.2 The Fishery Management Plan and the Framework Process

Since April 1999, NMFS has been managing the Atlantic tunas fisheries under the dual authority of the Magnuson-Stevens Act and the Atlantic Tunas Convention Act (ATCA). The HMS FMP established a framework procedure for adjustment of the regulations necessary to achieve the management objectives in the HMS FMP. The framework process requires a public comment period and at least one public hearing, consistent with the Administrative Procedure Act. For further information on the FMP and framework processes, see Chapter 3 of the HMS FMP.

1.3 Endangered Species Act and Marine Mammal Protection Act

The preferred alternatives in this EA/RIR/FRFA would not be expected to increase endangered species or marine mammal interaction rates. On June 14, 2001, NMFS issued a Biological Opinion (BiOp) after concluding formal consultation for the HMS fisheries under Section 7 of the Endangered Species Act (ESA). The BiOp concluded that the pelagic longline fishery is likely to jeopardize the continued existence of threatened or endangered species. NMFS has implemented the reasonable and prudent alternatives from the BiOp, and the preferred alternatives from this EA/RIR/FRFA are consistent with, and would not adversely

affect, NMFS' actions to implement the reasonable and prudent alternatives required by the BiOp. The preferred alternatives of this EA/RIR/FRFA would not likely increase takes of listed species, nor foreclose the use of other alternatives for managing the Atlantic pelagic longline fleet and reducing adverse impacts on protected resources.

1.4 Impacts on Essential Fish Habitat

The Magnuson-Stevens Act established a program to promote the protection of essential fish habitat (EFH) in the review of projects conducted by Federal agencies, or under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After the Secretary has identified EFH, Federal agencies are obligated to consult with the Secretary with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

The area in which this action is planned has been identified as EFH for species managed by the New England Fishery Management Council, the Mid-Atlantic Fishery Management Council, the South Atlantic Fishery Management Council, the Gulf of Mexico Fishery Management Council, the Caribbean Fishery Management Council, and the Highly Migratory Species Management Division of NMFS. It is not anticipated that this action would have any adverse impacts to EFH and therefore no consultation is required.

2.0 Alternatives

This section describes the alternatives considered in this EA/RIR/FRFA. Section 2.1 describes the alternatives considered regarding changing the target catch requirements for BFT retention by pelagic longline vessels. Section 2.2 presents the three alternatives NMFS considered regarding moving the North/South division line and modifying the BFT quota distribution between the northern and southern areas within the Longline category. Section 2.3 presents the three alternatives NMFS considered regarding providing the Agency authority to adjust the BFT trip limits for longline vessels during the season. The alternatives are evaluated in Section 4.

2.1 Approach One: Adjusting Target Catch Requirements for BFT Retention by Pelagic Longline Vessels

The following alternatives represent the range of options considered by NMFS regarding changing the target catch requirements for BFT retention by pelagic longline vessels. The alternatives range from no action (status quo) to adjusting the target catch requirements in all areas, and varying the target catch requirements seasonally.

2.1.1 Alternative 1: No Action/Status Quo

This alternative would maintain the status quo, in which the HMS regulations require that the weight of BFT landed by longline vessels north of 34° N. latitude be no more than two

percent of the total weight of the other catch landed for a trip (i.e., for a target catch of 30,000 lbs. it would be possible to retain three BFT assuming a dressed weight of 200 lbs. for a commercial sized BFT). South of 34° N. latitude, pelagic longline vessels are allowed one BFT per trip, provided that they land 1,500 lbs. of other catch from the same trip from January through April, and 3,500 lbs. of other catch from the same trip from May through December.

2.1.2 Alternative 2: Adjust Target Catch Requirements in Northern Area from Two Percent to 3,500 lbs. of Other Catch to Retain One BFT

This alternative would adjust the target catch requirements to allow pelagic longline vessels landing north of 34° N. latitude to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip. This alternative would not modify the target catch requirements south of 34° N. latitude.

2.1.3 Alternative 3: Adjust Target Catch Requirements in Northern Area to 3,500 lbs. of Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT

This alternative would adjust the target catch requirements to allow pelagic longline vessels landing north of 34° N. latitude to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip. This alternative would not modify the target catch requirements south of 34° N. latitude.

2.1.4 Alternative 4: Adjust Coastwide Target Catch Requirements to 3,500 lbs. of Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT, with Southern Area allowed One BFT with only 1,500 lbs. from January through April

This alternative would adjust the target catch requirements to allow pelagic longline vessels in all areas to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip. However, from January through April, this alternative would allow pelagic longline vessels landing south of 34° N. latitude to land their one BFT per trip with only 1,500 lbs. of other fish from the same trip.

2.1.5 Alternative 5: Adjust Coastwide Target Catch Requirements to 2,000 lbs. of Other Catch to Retain One BFT; 6,000 lbs. of Other Catch to Retain Two Bluefin Tuna; and 30,000 lbs of Other Catch to Retain Three BFT (Preferred Alternative)

This alternative would adjust the target catch requirements to allow pelagic longline

vessels in all areas and times to land one BFT per trip, provided they also land 2,000 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip, or three BFT per trip, provided they also land 30,000 lbs. of other catch from the same trip. This alternative has been slightly modified from that presented in the draft EA.

The preferred g15

alternative now contains a third tier of target catch requirements to allow the retention of three BFT at levels already allowed and provided for under the status quo.

2.1.6 Alternative 6: Adjust Coastwide Target Catch Requirements to 1,500 lbs. of Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT

This alternative would adjust the target catch requirements to allow pelagic longline vessels in all areas and times to land one BFT per trip, provided they also land 1,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip.

2.2 Approach Two: Moving the North/South Division and Reallocating Quota between Areas

The following alternatives represent three options considered by NMFS regarding moving the North/South division line and reallocating Longline category BFT quota. The purpose of moving the division line and reallocating quota would be to find a division line that better reflects the seasonal and other differences in the northern and southern fisheries. In addition, the division line should not be near an area where fish are usually landed, i.e., it should be clear that fish caught in a particular area will be landed in that area. Adjusting the quota between the two zones would be done to adjust for the increase/decrease in area for each zone. The three alternatives considered are discussed below.

2.2.1 Alternative 1: No Adjustment in Longline Category North/South Division Line or Subquotas (No Action/Status Quo)

This alternative would maintain the status quo, with the North/South division line at 34° N. Latitude, and would maintain the quota allocation between the two areas at 78.9 percent for the southern area and 21.1 percent for the northern area.

2.2.2 Alternative 2: Move North/South Division Line to 31°00' N. latitude, and Change Subquota Allocation to 60/40 Percent for the Southern/Northern Areas (Preferred Alternative)

This alternative would move the Longline category North/South division line to 31°00' N. latitude near Jekyll Island, Georgia, and adjust the Longline category subquotas to allocate 60

percent to the southern area and 40 percent to the northern area. This alternative has been slightly modified from that presented in the draft EA. The draft EA proposed allocation of subquotas with 70 percent to the south and 30 percent to the north. The change was suggested and implemented based on a review of the analyses (see Section 4.2.2) and public comment.

2.2.3 Alternative 3: Eliminate North/South Division Line and Establish One Longline Category Quota for All Areas

This alternative would eliminate the Longline category North/South division line and establish one quota for the Longline category for all areas.

2.3 Approach Three: Inseason Adjustment Authority for Target Catch Requirements

The following alternatives represent three options considered by NMFS regarding inseason authority to modify BFT retention limits by pelagic longline vessels. The purpose of providing NMFS inseason authority to adjust the target catch requirements for BFT retention by longline vessels would be to increase the likelihood of meeting the management objectives for the BFT fishery on an inseason basis. The three alternatives considered are discussed below.

2.3.1 Alternative 1: No Inseason Adjustment Authority (No Action/Status Quo)

This alternative would maintain the status quo, in that NMFS does not have the authority to adjust the amount of BFT that could be retained by longline vessels on a trip within a season. The limits and target catch requirements would be fixed, and NMFS could only close the fishery when the quota (or area subquota) was reached. Any subsequent adjustments would require notice and comment rulemaking.

2.3.2 Alternative 2: Provide NMFS with Inseason Adjustment Authority to Adjust the BFT Retention Limits by Number of Fish Only

This alternative would provide NMFS with authority to adjust the BFT retention limits for pelagic longline vessels from a range of zero (closure) to three fish per trip. NMFS would be able to adjust the limits through an inseason action, with 30 days public notice. This authority would be similar to the inseason authority NMFS has to adjust the General category BFT daily retention limit from zero (closure) to three BFT per vessel. This alternative would not provide NMFS the inseason authority to adjust the target catch requirements for BFT retention (e.g. 3,500 lbs. to 3,000 lbs.).

2.3.3 Alternative 3: Provide NMFS with Inseason Adjustment Authority to Adjust the BFT Retention Limits by Number of Fish and Target Catch Requirement by Weight (Preferred Alternative)

This alternative would provide NMFS with authority to adjust the BFT retention limits for pelagic longline vessels by number from a range of zero (closure) to three fish per trip and/or

by weight within 25 percent of the target catch requirements (e.g., 2,000 lbs. to 2,500 lbs.). NMFS would be able to adjust the limits through an inseason action, with at least 21 days public notice. The required notification period for public notice was modified from 30 days in the proposed rule in response to public comment on the need for timely adjustments to meet objectives. This authority would be similar to the inseason authority NMFS has to adjust the General category BFT daily retention limit from zero to three BFT per vessel.

2.4 Alternatives Preliminarily Considered but Rejected

In developing the above alternatives, NMFS identified several additional alternatives that were considered preliminarily but then rejected. These included alternatives that would use a percentage of target catch to determine the amount of BFT that could be retained, an approach currently used for vessels landing bluefin north of 34° N. latitude. The rationale for rejecting alternatives using percentages of target catch, as well as other methods for addressing discards of BFT by pelagic longline vessels, is explained below.

Defining Target Catch Requirements in Percentage Terms

Current target catch requirements for areas north of the 34° N. latitude boundary line are based on a percentage: BFT landings cannot exceed two percent of the weight of the rest of the landed catch. One way to modify the current regulations would be to increase the percentage so that more BFT could be landed. However, at the HMS and Billfish AP meeting in April 2001, several NMFS Enforcement Special Agents explained that target catch requirements would be more easily enforced if the amount of BFT allowed to be retained was defined by a number of fish and not by a percentage. In order to enforce a percentage of target catch requirement, enforcement agents would need to observe entire weighouts and be concerned with the exact weight of the BFT and other landings, which would not be an efficient use of NMFS' limited enforcement resources. With the retention of BFT defined in terms of a number of fish, agents would only need to inspect the offloading to determine the number of BFT landed and the general weight of the other catch.

Alternative Methods of Addressing BFT Discards

In the Revised Final Environmental Impact Statement (EIS) for the HMS FMP, NMFS considered several alternatives for reducing dead discards of incidentally caught BFT by pelagic longline vessels and selected a final action that closed the Mid-Atlantic Bight during the month of June. NMFS examined and rejected several other alternatives, including adopting the "Canadian model" for dealing with bluefin bycatch and closing all longline fisheries once any HMS quota was reached. Refer to Section 3.5.3 of the HMS FMP for additional information on these alternatives. While these previously examined alternatives were not reconsidered at this time, these alternatives, as well as additional time/area closures and other approaches for dealing with dead discards of BFT, may be considered in the future either through framework adjustments or an FMP amendment.

3.0 Description of the Fishery and Affected Environment

3.1 The U.S. Pelagic Longline Fishery

The U.S. Atlantic pelagic longline fleet operates in all areas of the Atlantic Ocean from the Grand Banks to the Gulf of Mexico (and sometimes even further south). Caribbean and South Atlantic vessels are generally smaller and tend to operate only regionally, while larger vessels may traverse several regions on a seasonal basis. Pelagic longline operations encounter many species of fish; some of those captured are marketable and thus are retained, others are discarded for economic or regulatory reasons. Species frequently encountered are swordfish, tunas, and sharks, as well as billfish, dolphin, wahoo, king mackerel, and other finfish species. Occasionally, pelagic longline gear also interacts with sea turtles, marine mammals, and sea birds, known collectively as “protected” species. All of these species are Federally managed, and NMFS seeks to control the mortality of regulated or protected species that results from fishing operations. Detailed descriptions of the life histories and population status of these species are given in the HMS FMP and are not repeated here. Management of declining fish populations requires reductions in fishing mortality from both directed and incidental fishing sources. The status of the stocks of Atlantic HMS are summarized in Chapter 2 of the 2003 Stock Assessment and Fishery Evaluation for HMS (SAFE Report, NMFS 2003), and are not repeated here.

Pelagic longline gear is composed of several parts. The primary fishing line, or mainline of the longline system, can vary from five to 40 miles in length, with approximately 20 to 30 hooks per mile. The depth of the mainline is determined by ocean currents and the length of the floatline, which connects the mainline to several buoys and periodic markers with radar reflectors and radio beacons. Each individual hook is connected by a leader to the mainline. Lightsticks, which contain chemicals that emit a glowing light, are often used. When attached to the hook and suspended at a certain depth, they attract bait fish which may, in turn, attract pelagic predators. When targeting swordfish, the lines generally are deployed at sunset and hauled in at sunrise to take advantage of the nocturnal near-surface feeding habits of the large pelagic species (Berkeley *et al.*, 1981). In general, longlines targeting tuna are set in the morning, deeper in the water column, and hauled in the evening. Except for vessels of the distant water fleet which undertake extended trips, fishing vessels preferentially target swordfish during periods when the moon is full to take advantage of increased densities of pelagic species near the surface. Those sets targeting dolphin fish are set in the daytime near the surface, with shorter longlines and shorter soak time.

Secondary hook and line gear is permitted onboard pelagic longline vessels. Longliners use harpoons for safer handling of larger fish, and for the occasional harvest of free swimming fish that approach the vessel during haul-back. Using a technique known as “green sticking,” fishermen may use a long pole to extend several longline leaders and hooks behind the vessel. Typically, this line is trolled while hauling the primary gear or while the vessel is moving on the fishing grounds. “Jigging machines” are a type of bandit gear used for trolling for HMS. Many

pelagic longliners troll regular rod and reel gear while drifting to determine what species are available in the area they are passing through.

For a complete description of the U.S. pelagic longline fishery, including operations, catches, and discards, please see the HMS FMP, the 2003 SAFE Report, and the July 2002 Final Supplemental Environmental Impact Statement for Regulatory Amendment 2 to the HMS FMP to Reduce Sea Turtle Bycatch and Bycatch Mortality in HMS (NMFS 2002a).

3.2 BFT Catches, Landings, and Discards in the U.S. Pelagic Longline Fishery

Since the November 2002 meeting of ICCAT, the United States is allocated 1,489.60 mt of western BFT under the ICCAT Rebuilding Program and the BFT Longline category is allocated 8.1 percent of the total U.S. BFT landings quota. The Longline category quota is split between northern and southern areas, with 78.9 percent allocated to the southern area and 21.1 percent allocated to the northern area. Initial BFT quotas and landings in the Longline category are shown from 1997 through 1999 in Table 1. Estimates of BFT discarded dead by pelagic longline vessels, calculated using logbook tallies are provided in Table 2. In 1997 and 1998, discards were higher proportionally (dead discards to BFT landed) in the northern area compared to the southern area (mostly Gulf of Mexico), but in 1999 this relationship changed where a higher proportion of the dead discards being reported through the pelagic logbook occurred in the southern area. Figures 2 and 3 show graphically the areas and magnitude of BFT catches and discards by pelagic longline vessels for 1997-1999.

Several reviews of landings, logbook, and observer data have been conducted in recent years regarding the pelagic longline fishery interactions with BFT. Observer data for 1991 through 1994 indicate that two or fewer BFT were hooked on 91 percent of all observed longline trips. Observer data for 1998 through 2000 indicate that two or fewer BFT were caught on 88 percent of all observed pelagic longline trips, and two or fewer BFT were caught on 58 percent of those trips that caught BFT (See Figure 4).

Trip level longline landings information for 1998 through 2000 are presented in Tables 3a through 3d, showing average, median and 75th percentile landings for pelagic longline trips. In compiling the data for these tables, NMFS excluded those pelagic longline trips with less than 300 lbs. of landed catch. These smaller trips are not likely to catch a BFT, and many of them occurred on the east coast of Florida, where pelagic longline fishing is now prohibited (August 1, 2000, 65 FR 47214). Table 3a presents average, median, and 75th percentile landings data for all pelagic longline trips that landed more than 300 lbs. of fish. Because the target catch requirements are based on the amount of landed catch of species other than BFT, the weight of the BFT landed on the pelagic longline trips was excluded in compiling the data for Table 3a. Table 3b presents similar information to Table 3a, but excludes all trips in which BFT were landed. This was done to eliminate any potential bias in the data that may occur due to vessels increasing the length of their trip (to increase their catch) to meet the BFT target catch requirements. Tables 3c and 3d show similar information to Tables 3a and 3b, but include South Carolina and Georgia in the northern area (as would be the case if the preferred alternative was

implemented).

Table 3a shows that median values for landed catch (not including BFT) were 3,074 lbs. (1,394 kg) for trips made in the months of January through April, and 3,526 lbs. (1,599 kg) for trips made in May through December, in fisheries south of 34° N. latitude; and 3,787 lbs. (1,718 kg) for trips made throughout the year in fisheries north of 34° N. latitude. Year-round south of 34° N. latitude, median trip level landings were 3,336 lbs. (1,513 kg). For the same time period, 75 percent of the trips had a landed catch (other than BFT) of at least 1,245 lbs. (565 kg) for trips made in the months of January through April, and 1,384 lbs. (628 kg) for trips made in May through December, in fisheries south of 34° N. latitude; and 1,786 lbs. (810 kg) for trips made throughout the year in fisheries north of 34° N. latitude. Throughout the year south of 34° N. latitude, 75 percent of all trips landed at least 1,343 lbs. (609 kg).

Table 3b shows that median values for landed catch on trips that did not land BFT were 2,770 lbs. (1,256 kg) for trips made in the months of January through April, and 3,388 lbs. (1,537 kg) for trips made in May through December, in fisheries south of 34° N. latitude; and 3,474 lbs. (1,576 kg) for trips made throughout the year in fisheries north of 34° N. latitude. Year-round south of 34° N. latitude, median trip level landings were 3,128 lbs. (1,419 kg). For the same time period, 75 percent of the longline trips that did not land BFT had a landed catch of at least 1,060 lbs. (481 kg) for trips made in the months of January through April, and 1,344 lbs. (610 kg) for trips made in May through December, in fisheries south of 34° N. latitude; and 1,634 lbs. (741 kg) for trips made throughout the year in fisheries north of 34° N. latitude. Throughout the year south of 34° N. latitude, 75 percent of all trips landed at least 1,236 lbs. (561 kg).

Including South Carolina and Georgia in the northern area does not significantly alter the average, median, or 75th percentile trip-level landings calculated for pelagic longline vessels in either the northern or southern areas. Table 3c shows that median values for landed catch (not including BFT) were 3,220 lbs. (1,461 kg) for trips made in the months of January through April, and 3,570 lbs. (1,519 kg) for trips made in May through December, in fisheries south of 31° N. latitude; and 3,586 lbs. (1,627 kg) for trips made throughout the year in fisheries north of 31° N. latitude. Year-round south of 34° N. latitude, median trip level landings were 3,452 lbs. (1,566 kg). For the same time period, 75 percent of the trips had a landed catch (other than BFT) of at least 1,249 lbs. (567 kg) for trips made in the months of January through April, and 1,337 lbs. (606 kg) for trips made in May through December, in fisheries south of 31° N. latitude; and 1,718 lbs. (779 kg) for trips made throughout the year in fisheries north of 31° N. latitude.

Throughout the year south of 31° N. latitude, 75 percent of all trips landed at least 1,301 lbs. (590 kg).

Table 3d shows that median values for landed catch on trips that did not land BFT were 2,880 lbs. (1,306 kg) for trips made in the months of January through April, and 3,421 lbs. (1,552 kg) for trips made in May through December, in fisheries south of 31° N. latitude; and 3,253 lbs. (1,476 kg) for trips made throughout the year in fisheries north of 31° N. latitude.

Year-round south of 34° N. latitude, median trip level landings were 3,217 lbs. (1,459 kg). For the same time period, 75 percent of the longline trips that did not land BFT had a landed catch of at least 1,040 lbs. (472 kg) for trips made in the months of January through April, and 1,268 lbs. (575 kg) for trips made in May through December, in fisheries south of 31° N. latitude; and 1,615 lbs. (733 kg) for trips made throughout the year in fisheries north of 31° N. latitude. Throughout the year south of 31° N. latitude, 75 percent of all trips landed at least 1,177 lbs. (534 kg).

These tables show that the trips that did not land BFT were generally smaller than those that did, which may be attributable to the incentive to meet the target catch requirements, but they also show that there is not much of a difference in landings levels between the northern and southern areas, or a large seasonal difference in the southern area. For example, median trip level landings south of 31° N. latitude (3,452 lbs.) are very similar to those north of 31° N. latitude (3,586 lbs.). In addition, median trip level landings south of 31° N. latitude are only a few hundred pounds lower during January through April (3,220 lbs.) than they are from May through December (3,570 lbs.). This indicates that different target catch requirements in the northern and southern areas, and seasonal differences in the target catch requirements in the southern area, may no longer be warranted given the current operations of the fleet.

3.3 Compliance with Target Catch Requirements

In 2000, NMFS conducted an analysis of trip-level pelagic longline landings of BFT and other species to assess compliance-related issues with the current target catch requirements. The analysis showed that for the years 1995-1999, less than ten percent of the trips that landed BFT in the northern area landed the required amount of target catch. The compliance rate in the southern area was greater over the same time period, with over 93 percent of the trips landing the required level of target catch. In May 2000, NMFS mailed a letter to all pelagic longline vessel owners reminding them of the regulations, and subsequently, compliance with the target catch requirements improved. Preliminary analysis of 2000 longline landings show that most trips that land BFT in the northern area are now also landing the required level of target catch. The amount of pelagic longline landings of BFT decreased in 2000 compared to 1998 and 1999, which is consistent with increased compliance with the target catch regulations (See Table 1). However, if interaction rates have remained unchanged, this also indicates that dead discards have increased.

3.4 Evaluation of Closed Area in June to Decrease BFT Bycatch in the Pelagic Longline Fishery

The effectiveness of the closed area established in 1999 to reduce dead discards of BFT by pelagic longline vessels was evaluated in the 2001 and 2002 HMS SAFE Reports. A portion of the latest evaluation is presented here. The number of BFT landed and discarded by month

and year is reported in the pelagic logbook. Tables 4 and 5 provide an enumeration of logbook submissions of the disposition of BFT catches (kept, discarded dead, discarded alive). It should be noted that this information does not consider the pooling method utilized to report dead discards of BFT and other species to ICCAT. The pooling method was used to estimate mortality rates for stock assessment by ICCAT's Standing Committee on Research and Statistics (SCRS), but was not used for Task I data submission or to evaluate compliance with the ICCAT recommendations regarding the dead discard allowance. In Table 4, the rows designated as "closed" represent the area in the Northeast/Mid-Atlantic Bight closed to pelagic longline fishing during the month of June. "Open" represents all other areas in the Atlantic Ocean. The portion of Table 5 designated as "Closed" represents the area in the Northeast/Mid-Atlantic Bight that is closed in June but the number represents those fish caught in that area for the entire year; "Open" represents all other areas of the Atlantic Ocean fished by U.S.-flagged pelagic longline vessels. "Discarded" is both discarded dead and discarded alive. Tables 4 and 5 illustrate that, while annual landings of BFT from the closed area have been reduced, the number of BFT kept has not been reduced. These data indicate that the June closure has been effective at reducing bluefin discards while not significantly reducing BFT landings. This was expected as most of the interactions in the area did not previously result in landings anyway, due to the target catch requirements. Nevertheless, BFT discards continue and data suggest that the current target catch requirements result in unnecessary dead discards, while the quota allocated to account for these incidental catches remains unused.

4.0 Consequences of Alternatives Including the Preferred Alternatives

The impacts of each alternative identified in Section 2 are discussed separately in the following sections in the context of the relevant Magnuson-Stevens Act National Standards and the objectives of the HMS FMP, such as those regarding bycatch reduction and community impacts. The economic impacts of each alternative are briefly summarized in the following sections, and are described more fully in Section 5 (RIR).

For all of the target catch alternatives, this Section of the EA/RIR/FRFA estimates, on an annual basis, how many BFT could be kept (landings) and the amount of dead discards that would occur. Annual BFT landings are estimated using fishermen-reported data (how many trips and pounds of fish landed per trip) and information from NMFS' observer program (how frequently BFT are encountered on longline trips). The average annual number of pelagic longline trips (for an area and/or time period from logbook data) multiplied by the frequency with which pelagic longline trips interact with BFT (from observer data), is then multiplied by the percentage of such trips that land the required target catch to retain a BFT (from weighout data) to estimate different reductions in BFT discards under each alternative (i.e. applying different target catch requirements to the landings database provides a means of predicting different amounts of bluefin that might be landed and discarded for each target catch requirement scenario). The difference in landings between any two alternatives is also the reduction or increase in discards for the two alternatives.

For scenarios and alternatives that allow discarded BFT to be landed and counted against

the available quota it is likely that total mortality of BFT will decrease. This is because ATCA requires NMFS to make all the quota allocated by ICCAT to the United States available to domestic fishermen. Thus, in the past, unharvested quota in the longline category has frequently been transferred and made available to other domestic categories for additional fishing opportunities. If this previously considered unharvested quota is now used by converting pelagic longline discards to landings, and the landings are counted against the longline quota, less quota will be available to transfer to other categories for additional fishing activity and mortality of BFT. Conversion of discard mortality to landings would help address the phenomenon referred to as “double killing” of BFT as longline quota would be used to count for landing mortality versus discards and would not be available for transfer and accounting of mortality in other fishing categories. Also, because discards will likely decrease, the United States would use less of its dead discard allowance, which will have positive impacts on the stock as, per the ICCAT recommendation, half the unused portion of the dead discard allowance cannot be carried over to future years and is, in that sense, invested in stock rebuilding.

The different scenarios and inputs for each target catch requirement and corresponding calculations for each alternative are shown in Table 6. Longline BFT quotas under various alternatives are shown in Table 7. The BFT estimated to be landed under each alternative are shown in Table 8, and changes in revenues due to estimated changes in landings are shown in Table 9.

4.1. Approach One: Adjusting Target Catch Requirements for BFT Retention by Pelagic Longline Vessels

The following alternatives represent the range of options considered by NMFS regarding changing the target catch requirements for BFT retention by pelagic longline vessels. The alternatives range from no action (status quo) to adjusting the target catch requirements in one or all areas, including alternatives that would maintain similar target catch limits at all times throughout the year.

Each of the target catch alternatives is considered and analyzed under two circumstances. The first analysis maintains the current boundary line (34° N. latitude) and quota subdivision between the northern and southern areas. The second analysis adjusts the boundary line to 31° N. latitude, which would result in landings in South Carolina and Georgia being included in the northern area, and adjusts the quota subdivision as described in Section 4.2.2 (Approach Two, Preferred Alternative).

4.1.1 Alternative 1: No Action/Status Quo

The no action alternative would maintain the current HMS regulations that require that the weight of BFT landed by longline vessels north of 34° N. latitude be no more than two percent of the total weight of the other catch landed for a trip. South of 34° N. latitude, pelagic longline vessels are allowed one BFT per trip, provided that they land 1,500 lbs. of other catch on a trip from January through April, and 3,500 lbs. of other catch from May through December.

As noted above, this alternative is being analyzed and considered under the existing 34° N. latitude boundary line, as well as under the alternative 31° N. latitude line that would add South Carolina and Georgia landings to the northern area. Under either boundary line, the no action alternative is not preferred because other alternatives could likely reduce dead discards consistent with the management needs discussed in Section 1.0.

Ecological Impacts

The ecological impacts of no action would be continued discarding of BFT by longline vessels with corresponding negative impacts such as wasting commercially valuable fish and contributing to increased mortality. For the no action/status quo alternative, annual BFT landings are evaluated using both estimates from fishermen-reported and observer data, as well as actual landings in 2000 obtained through the BFT dealer reporting program. Assuming that, in the northern area, about 10,000 lbs. of target catch are required to be able to legally land a BFT on a trip, about 20 percent of the pelagic longline trips in the northern area landed enough target catch to land a BFT during 1998-2000. According to observer data from the same time period, about 20.2 percent of observed longline trips caught a BFT. Multiplying the average annual number of pelagic longline trips landing in the northern area during this time period (655) by the percent of trips that had enough target catch to land a BFT (20.0 percent), then multiplying this result by the percent of observed trips that actually encountered a BFT over the same time period (20.2 percent), results in an estimated 26 trips that would legally land one BFT under the no action/status quo alternative. However, some trips may land more than one BFT in the northern area under the status quo. Multiplying the total number of trips by the percentage of trips that landed 20,000 lbs. of target catch (5.9 %) and the percentage of observed trips that caught at least two BFT (13.6 %) provides an estimate of five trips during which vessels would land two BFT. The first BFT that these trips landed is already counted in the 26 trips that would land one BFT, thus the total number of BFT landed is 31 (26 + 5). Applying the same analysis to those vessels that would have enough target catch to land three BFT (30,000 lbs. of other landings) results in an estimated two trips that would land three BFT. Few vessels in the current fleet are large enough to land more than 30,000 lbs. per trip. Thus, the total number of estimated, annual BFT landings is 33. Using the average round weight of BFT landed by pelagic longline vessels in the northern area in 2000 of 456 lbs., 33 fish is equivalent to 6.8 mt.

This estimated number of BFT landed in the northern area, under the status quo, is less than the average that was actually landed during 1998-2000, which was about 90 BFT per year. As described in Section 4, over the last several years, many vessels landed BFT without meeting the minimum target catch requirement. After NMFS sent a letter to longline vessels in May 2000 reminding them of the regulations, compliance improved and the number of BFT landed in the northern area dropped to 56 (11.6 mt) in 2000.

For the southern area, pelagic longline landings of BFT during 1999-2000 correspond exactly with those estimated using the target catch/observer data methodology described above (because observed data are the basis of extrapolated landings estimates and assume 100 percent compliance) (see Table 8). Pelagic longline landings in the southern area totaled 211 BFT a year

in both 1999 and 2000, and the target catch/observer data approach also estimates 211 BFT landings in the southern area. Using the average round weight of BFT landed by pelagic longline vessels in the southern area in 2000 of 537 lbs., 211 fish are equivalent to 51.4 mt. Removing South Carolina and Georgia from the southern area, under the alternative 31° N. latitude boundary line, results in 209 actual fish (50.9 mt) landed, or an estimated 194 fish (47.3 mt) landed using the target catch/observer data methodology, in the southern area.

Catches of BFT (both kept and discarded), as reported in pelagic logbook reports, average 1,118 fish per year from 1998-2000 (see Table 5). Comparing catches before and after the time/area closure in the Mid-Atlantic Bight was implemented, catches of BFT dropped from 1,541 in 1998 to 963 in 2000 (the closure was implemented mid year in 1999). Just as with landings, BFT catches also can be estimated by multiplying the total number of pelagic longline trips by the percentage of trips observed that caught BFT. Under this estimation methodology, in the northern area, with an annual average of 655 trips, and using the percentage of trips in which one, two, and three BFT were caught (from observer data, as in the calculations above), an estimated 277 BFT would be caught each year (See Table 6). In the southern area, with an annual average of 1,817 longline trips per year, 770 BFT would be caught each year (calculated using the same methodology). Thus, there would be an estimated total of 1,047 (277 + 770) BFT caught on average each year from 1998-2000. Including landings from South Carolina and Georgia in the northern area, the estimated 1,047 BFT caught would not change, but the distribution of BFT caught would change to 346 in the northern area and 701 in the southern area. Because this estimation methodology and the 1998-2000 data are also applied to landings, the EA/RIR/FRFA uses 1,047 as the estimated number of BFT caught each year as a baseline for evaluating the alternatives relative to the objectives.

Subtracting the number of landings from the number of catches results in an estimated 803 BFT discarded coastwide, 244 in the northern area and 559 in the southern area. Under the alternative to re-align northern and southern areas, the no action alternative would result in 819 BFT discarded, 312 in the northern area and 507 in the southern area. Generally speaking, pelagic logbook reports from 1998-2000 indicate that about 40 percent of the BFT discarded are discarded dead. Using this percentage estimate, this alternative would result in 321 BFT discarded dead under the current 34° N. latitude boundary line, and 328 BFT discarded dead under the alternative north/south division at 31° N. latitude. Reports from NMFS observers on pelagic longline vessels, however, indicate that approximately 70 percent of the BFT discarded are discarded dead (approximately 75 percent in the southern area, and 67 percent in the northern area). Using the percentage dead estimate from observer data, the no action alternative would result in 526 BFT discarded dead under the current boundary line, and 573 BFT discarded dead under the alternative 31° N. latitude boundary line. The increased estimate of dead discards under the alternative boundary line alternative can be attributed to an expanded application of the current (more restrictive) target catch requirements to a larger area and higher percentage of landings. The preferred alternative on target catch requirements, in combination with the preferred alternatives on moving the boundary line and inseason adjustment authority, would ensure that any increase in dead discards, should that occur, can be addressed on a real-time basis.

Social and Economic Impacts

The no action/status quo alternative would maintain a system under which much of the BFT caught by pelagic longline vessels must be discarded. The fish that are discarded dead are accounted for through a data collection process and counted towards the U.S. dead discard allowance. However, the fish are not landed and sold, thus there is no economic benefit derived from the BFT dead discards. As the pelagic longline industry has come under increased scrutiny in recent years, several regulatory requirements have affected vessels' profitability. These included several time/area closures designed to reduce the bycatch of billfish, BFT, sea turtles, and undersize swordfish. These closures may make it more difficult for vessels to catch the amount of target catch currently required to retain a BFT because vessels had fished these areas presumably due to higher catch rates and/or lower costs.

Pelagic longline vessels operate out of several ports on the coasts of the west Atlantic and Gulf of Mexico that depend on the fishing industry. These ports include Barnegat Light, NJ, Fairhaven/New Bedford, MA, and Venice, LA. Information on these communities and their relationship to the fisheries for Atlantic HMS is provided in Chapter 9 of the HMS FMP as updated with subsequent HMS SAFE Reports (NMFS 2000, 2001 and 2002). Maintaining the current target catch requirements, which result in the discarding of a significant number of dead BFT by pelagic longline vessels, continues to hurt the economic viability of a pelagic longline industry already experiencing economic difficulties due to regulatory constraints instituted to address other overfishing and bycatch problems.

Conclusion

For the reasons explained in the above discussion of the ecological, social, and economic consequences of the no action/status quo alternative, as well as in Sections 1 and 4 of this EA/RIR/FRFA, maintaining the status quo is not optimal with respect to the objectives of the HMS FMP, its objectives, the Magnuson-Stevens Act, and the National Standard Guidelines.

4.1.2 Alternative 2: Adjust Target Catch Requirements in Northern Area from Two Percent to 3,500 lbs. of Other Catch to Retain One BFT

This alternative would adjust the current target catch requirements (large medium and giant BFT may not exceed two percent by weight of all other fish species retained) to allow pelagic longline vessels landing north of 34° N. latitude to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip. This alternative would not modify the target catch requirements south of 34° N. latitude. As with the no action/status quo alternative, this alternative is considered and analyzed under the existing 34° N. latitude boundary line and alternative 31° N. latitude line described in Section 4.2.2 (Approach 2, Preferred Alternative).

Ecological Impacts

This alternative would allow longline vessels that land their catch in the northern area to retain a BFT on more trips, as the median landings of pelagic longline trips in the northern area have been about 3,700 lbs. for the years 1998-2000. According to the 1998-2000 weighout data, under the existing 34° N. latitude boundary line, 54.1 percent of pelagic longline trips that landed in the northern area landed 3,500 lbs. or more of catch other than BFT. This compares to about 20 percent of trips that landed 10,000 lbs. or more, which is what would likely be the minimum target catch that would allow a vessel to land a BFT under the current regulations. Thus, this alternative would likely increase the amount of BFT that could be landed by longline vessels in the northern area, consequently, decreasing their discards and having a slightly positive impact on the environment and western BFT stock by reducing overall mortality, as explained in the beginning of Section 4.

Applying the estimation methodologies discussed in the no action/status quo alternative, this alternative would result in the discarding of 205 BFT in the northern area, a decrease of 16 percent from the status quo, and would result in longline landings of about 72 BFT in the northern area. Coastwide, this alternative would result in the discarding of 764 BFT, a decrease of 4.9 percent from the status quo, and would result in longline landings of about 283 BFT coastwide. Assuming 40 percent of discards are dead (percentage estimate from logbook reports), this alternative would result in 82 and 302 BFT discarded dead in the northern area and coastwide, respectively. Assuming that 70 percent of discards coastwide, or 67 percent in the northern area, are dead (percentage estimate from observer reports), this alternative would result in 137 and 535 BFT discarded dead in the northern area and coastwide, respectively. As this alternative would only modify the target catch requirements in the northern area, it would not change the amount of BFT landed or discarded by pelagic longline vessels in the southern area.

The landings estimate for this alternative was calculated by multiplying the average annual number of pelagic longline trips landing in the northern area during this time period (655) by the percent of trips that had enough target catch to land a BFT (54.1 percent), then multiplying the result by the percent of observed trips that actually encountered a BFT over the same time period (20.2 percent), thus producing an estimated 72 trips that would legally land one BFT, or 72 BFT landed in the northern area. Using the average round weight of BFT landed by pelagic longline vessels in the northern area in 2000 of 456 lbs., 72 fish is equivalent to 14.9 mt. Discard estimates were calculated, as described in the no action/status quo alternative, by subtracting the number of fish that could be landed from the number of fish that are estimated to be caught.

As noted above, this alternative would likely increase the amount of BFT that could be landed by longline vessels in the northern area, thus decreasing their discards. It is possible that this alternative could increase BFT discards on longer pelagic longline trips where more fish is landed since it effectively would allow only one BFT per trip. Current regulations have no maximum retention limit. For example, if a vessel landed 40,000 lbs. of other fish on a trip, it could also land 800 lbs. of BFT, which could consist of one large fish or two or even three

smaller fish. However, such an impact would likely be small. From 1998-2000, only eight pelagic longline trips – out of a total of about 8,000 total trips with only about 645 landing a BFT – reported landing two or more BFT (seven trips had two BFT, one had three). Nonetheless, this alternative would not allow longline vessels to land two BFT in any event. Observer data from 1998-2000 indicate that while 58 percent of those pelagic longline trips that catch BFT catch two or less, only 33 percent caught only one (see Figure 4). Thus, this alternative would require over half of those trips that catch BFT to discard BFT, no matter how much target catch was landed. In addition, this alternative would not alter the target catch requirements in the southern area, where dead discards of BFT have increased over the last two years (see Table 2).

Modifying the target catch requirements for BFT retention could increase the incentive for longline vessels in the northern area to direct fishing effort on BFT. This is unlikely to occur under this alternative, however, as 3,500 lbs. of target catch is a significant amount of landings and thus a trip with this quantity in its hold to land would probably be a legitimate longline trip. Also, NMFS has received public comment that BFT are avoided, or at least not desired to be encountered in significant numbers, by pelagic longline vessels, because if multiple BFT are hooked on a set and die they can cause the gear to sink and be lost. Thus, NMFS would not anticipate any increase in overall fishing effort under this alternative.

Social and Economic Impacts

As mentioned above, trip level landings data for 1998-2000 indicate that this alternative would allow about 54.1 percent of pelagic longline trips in the northern area (about 50.9 percent if Georgia and South Carolina were included in the northern area) to land a BFT (i.e., had 3,500 lbs. of other landings). Meeting the target catch requirements does not mean that a vessel will catch a BFT that it can land, but this alternative would allow more of those that incidentally catch BFT to land the fish.

This alternative would positively affect revenues in the pelagic longline fishery. As described in the RIR, this alternative would increase the landings and gross revenues from BFT for pelagic longline vessels landing in the northern area by 28.4 percent, or by 44.1 percent if the North/South division line and subquota allocations were adjusted as described in Section 5.2.2 (Approach Two, Preferred Alternative). For the Longline category as a whole, this alternative would increase landings and gross revenues from BFT by 5.4 percent, or by 3.1 percent under the division line and subquota allocations from the Approach Two preferred alternative.

Conclusion

This alternative is not preferred at this time. As mentioned above, it does not alter the target catch requirements in the southern area, where dead discards of BFT have increased over the last two years. In addition, the majority of trips that do catch a BFT catch more than one, and this alternative would still result in many BFT caught by pelagic longline being discarded.

4.1.3 Alternative 3: Adjust Target Catch Requirements in Northern Area to 3,500 lbs. of

Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT

This alternative would adjust the target catch requirements to allow pelagic longline vessels landing north of 34° N. latitude to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip. This alternative would not modify the target catch requirements south of 34° N. latitude. As with the no action/status quo alternative, this alternative is considered and analyzed under the existing 34° N. latitude boundary line and alternative 31° N. latitude line described in Section 4.2.2 (Approach 2, Preferred Alternative).

Ecological Impacts

Similar to Alternative 2, this alternative would allow longline vessels that land their catch in the northern area to retain a BFT on more of their trips, as the median landings of pelagic longline trips in the northern area has been about 3,700 lbs. for the years 1998-2000. About 34.7 percent of trips in the northern area landed 6,000 lbs. or more over that same time period (about 30.0 percent if Georgia and South Carolina were included in the northern area). This compares to about 5 percent of trips that landed 20,000 lbs. or more, which is what would likely be the minimum target catch that would allow a vessel to land two BFT under the current regulations. Thus, this alternative would likely increase the amount of BFT that could be landed by longline vessels in the northern area, consequently, decreasing their discards and having a positive impact on the western BFT stock by reducing overall mortality, as explained in the beginning of Section 4.

Applying the estimation methodologies discussed in the no action/status quo alternative, this alternative would result in the discarding of 174 BFT in the northern area, a decrease of 28.6 percent from the status quo, and would result in longline landings of about 103 BFT (21.3 mt) in the northern area. Coastwide, this alternative would result in the discarding of 733 BFT, a decrease of 8.7 percent from the status quo, and would result in longline landings of about 314 BFT coastwide. Including landings in South Carolina and Georgia in the northern area results in landings of an estimated 118 BFT in the northern area, equivalent to 24.4 mt, and coastwide discards of 735 BFT, a decrease in coastwide discards of 8.5 percent. Using the estimates of 40 percent and 70 percent mortality for discards (from logbook and observer reports respectively), this alternative would result in a range of 293 and 515 BFT discarded dead coastwide, depending on the mortality estimate used.

Similar to Alternative 2, this alternative would not alter the target catch requirements in the southern area, where dead discards of BFT have increased over the last two years (see Table 2), and thus would not change the amount of BFT landed or discarded by pelagic longline vessels in the southern area. By modifying the target catch requirements, this alternative possibly may increase the incentive for longline vessels in the northern area to direct fishing effort on BFT. However, as with Alternative 2, this is unlikely to occur under this alternative, because 3,500 lbs. of target catch is a significant amount of landings, and it is doubtful that a trip with that amount of other landings would be a trip targeting BFT. Moreover, for the reasons

discussed under Alternative 2, NMFS would not anticipate any increase in overall fishing effort under this alternative.

Social and Economic Impacts

This alternative would have a positive impact on revenues in the pelagic longline fishery. As described in the RIR, this alternative would increase the landings and gross revenues from BFT for pelagic longline vessels landing in the north by 83.6 percent, or by 102 percent if the north/south division line and subquota allocations were adjusted as described in Section 5.2.2 (Approach Two, Preferred Alternative). For the Longline category as a whole, this alternative would increase landings and gross revenues from BFT by 16 percent, or by 14.6 percent under the division line and subquota allocations from the Approach Two preferred alternative.

Conclusion

This alternative is not preferred at this time. While it does address the fact that most longline trips that catch BFT catch more than one, it does not alter the target catch requirements in the southern area, where dead discards of BFT have increased over the last two years.

4.1.4 Alternative 4: Adjust Coastwide Target Catch Requirements to 3,500 lbs. of Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT, with Southern Area Allowed One BFT with only 1,500 lbs. from January through April

This alternative would adjust the target catch requirements to allow pelagic longline vessels in all areas to land one BFT per trip, provided they also land 3,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip. However, from January through April, this alternative would allow pelagic longline vessels landing south of 34° N. latitude to land their one BFT per trip with only 1,500 lbs. of other fish. As with the no action/status quo alternative, this alternative is considered and

analyzed under the existing 34° N. latitude boundary line and alternative 31° N. latitude line described in Section 4.2.2 (Issue 2, Preferred Alternative).

Ecological Impacts

Similar to Alternatives 2 and 3, this alternative would allow longline vessels that land their catch in the northern area to retain a BFT on more trips. In the northern area, this alternative is identical to Alternative 3. In the southern area, this alternative differs from the no action/status quo alternative only in that it would allow pelagic longline trips to land two BFT if they have 6,000 lbs. of other landings. Thus, this alternative would likely decrease BFT discards and have a positive impact on the western BFT stock by reducing overall mortality, as explained in the beginning of Section 4.

The ecological impacts of this alternative would be identical to Alternative 3 for the

northern area, but this alternative would also reduce discards and increase landings in the southern area. Applying the estimation methodologies discussed in the no action/status quo alternative, in the southern area, this alternative would result in the discarding of 494 BFT in the southern area, a decrease of 11.6 percent from the status quo, and would result in landings of about 276 BFT (67.5 mt). Coastwide, this alternative would result in the discarding of 668 BFT, a decrease of 16.8 percent from the status quo, and would result in longline landings of about 379 BFT (88.8 mt). Including landings in South Carolina and Georgia in the northern area results in landings of an estimated 374 BFT coastwide, equivalent to 86.8 mt, and coastwide discards of 673 BFT, a decrease in coastwide discards of 16.2 percent. Using the estimates of 40 percent and 70 percent mortality for discards (from logbook and observer reports, respectively), this alternative would result in a range of 267 and 471 BFT discarded dead coastwide, depending on the mortality estimate used.

This alternative would address the target catch requirements in both the northern and southern areas, and would address the fact that most longline trips that catch BFT catch more than one. Similar to the other alternatives that modify the target catch requirements, this alternative possibly could increase the incentive for longline vessels to direct fishing effort on BFT. However, as with the other alternatives, targeting BFT is unlikely to occur and no increase in overall fishing effort is anticipated under this alternative. Where this alternative differs from Alternative 3 is in the southern area, where it would not modify the minimum catch needed to retain one BFT, but only would allow vessels to retain two if they have 6,000 lbs. of target catch. The allowance for two fish in the southern area should not result in targeting of bluefin, as 6,000 lbs. of required target catch should ensure that a trip is not directed at BFT.

Social and Economic Impacts

This alternative would positively impact revenues in the pelagic longline fishery. As described in the RIR, this alternative would increase the landings and gross revenues from BFT for pelagic longline vessels coastwide by 41.3 percent, or by 38.4 percent if the North/South division line and subquota allocations were adjusted as described in Section 4.2.2 (Approach Two, Preferred Alternative).

Conclusion

This alternative is not preferred at this time. While this alternative addresses the fact that most longline trips that catch BFT catch more than one, and provides an allowance for pelagic longline vessels fishing in the southern area to land two BFT, this alternative still maintains a differential target catch requirements between the northern and southern area. This differential no longer seems to be warranted as the distribution of effort of the fleet, target catch rates, and BFT interaction rates have changed relative to the mid 1990s, trip level longline landings are similar in both the northern and southern areas, and the seasonal variation in the southern area no longer exists to the degree it did in the past (see Tables 3a through 3d).

4.1.5 Alternative 5: Adjust Coastwide Target Catch Requirements to 2,000 lbs. of Other

Catch to Retain One BFT, 6,000 lbs. of Other Catch to Retain Two BFT, and 30,000 lbs. of Other Catch to Retain Three BFT (Preferred Alternative)

This alternative would adjust the target catch requirements to allow pelagic longline vessel in all areas to land one BFT per trip, provided they also land 2,000 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip, or three BFT per trip, provided they also land 30,000 lbs. of other catch from the same trip. As with the no action/status quo alternative, this alternative is considered and analyzed under the existing 34° N. latitude boundary line and alternative 31° N. latitude line described in Section 4.2.2 (Approach 2, Preferred Alternative).

Ecological Impacts

This alternative differs from Alternative 4 in that it would lower the minimum target catch levels to retain one BFT, in all areas and at all times, to 2,000 lbs. Under the existing 34° N. latitude boundary line, in the northern area, 79.6 percent of pelagic longline trips landed 1,500 lbs. of target catch each year between 1998-2000. In the southern area, 71.8 percent of pelagic longline trips landed 1,500 lbs. of target catch annually during the same time period. In addition, this alternative provides a third “tier” of target catch allowance to allow pelagic longline line vessels to land three BFT per trip provided they also land 30,000 lbs. of other catch from the same trip. This allowance corresponds to target catch levels already considered and analyzed under the status quo where vessels in the northern area would need approximately 30,000 lbs. of target catch to land three BFT under the two percent by weight of target catch restriction. Although only a few vessels in the fleet are large enough to land more than 30,000 lbs. per trip, and only an estimated 2 trips per year would qualify for this third tier, it would further meet the purpose and need for this action by additionally slightly reducing discards without providing incentives to target BFT.

Applying the estimation methodologies discussed in the no action/status quo alternative, under the existing 34° N. latitude boundary line, this alternative would result in the discard of 148 BFT in the northern area, a decrease of 39.3 percent from the status quo, and would result in longline landings of about 129 BFT (26.7 mt). In the southern area, this alternative would result in the discarding of 462 BFT, a decrease of 17.3 percent from the status quo, and would result in longline landings of about 308 BFT (74.0 mt). Coastwide, this alternative would result in the discarding of 610 BFT, a decrease of 24.0 percent from the status quo, and would result in landings of about 437 BFT (100.7 mt). Including Georgia and South Carolina in the northern area, under the alternative 31° N. latitude boundary line, would not change estimated landings and discards coastwide, because this alternative would impose identical target catch requirements in both areas. Using 40 and 70 percent mortality estimates for discards (from logbook and observer reports respectively), this alternative would result in a range of 244 and 428 BFT discarded dead coastwide, depending on the mortality estimate used. This alternative would reduce dead discards of BFT and have a positive impact in the western BFT stock by reducing overall mortality, as explained in the beginning of Section 4.

This alternative would allow longline vessels landing their catch in any area to retain BFT on more trips, and would generally allow them to retain more BFT on most trips. The amount of BFT landed would approach the overall current quota levels of the Longline category (about 110 mt), but would not exceed it. This alternative would address the target catch requirements in both the northern and southern areas, and would address the fact that most longline trips that catch BFT catch more than one. It would also provide for the rare situations when those vessels large enough to hold 30,000 lbs. of target catch would also be allowed to land three BFT. This would have the slight additional positive impact of reducing the discard of a third BFT should the target catch exceed 30,000 lbs. and three BFT be incidentally caught. Similar to the other alternatives that modify the target catch requirements, this alternative may possibly increase the incentive for longline vessels to direct fishing effort on BFT. However, for similar reasons as those discussed in the above alternatives, targeting BFT is unlikely to occur and no increase in overall fishing effort is anticipated.

Social and Economic Impacts

This alternative would positively affect revenues in the pelagic longline fishery. As described in the RIR, this alternative would increase the landings and gross revenues from BFT for pelagic longline vessels coastwide by approximately 61 percent.

In addition, this alternative is among the simplest of those considered (similar to Alternative 6), in that the target catch requirements would not vary by region or during the year. Uniformity in the target catch requirements should make the regulations easier to understand and enforce, and may improve compliance with the regulations.

Conclusion

This alternative is preferred. While it still requires vessels to land a sufficient amount of target catch to ensure that vessels do not target BFT, at the same time, it addresses the fact that most longline trips that catch BFT catch more than one, provides an allowance for pelagic longline vessels fishing in the southern area to land two to three BFT, and should reduce the amount of regulatory discards of BFT in all areas. This alternative also eliminates the differential target catch requirements between the northern and southern areas, which no longer seem warranted. Trip level longline landings are similar in both the northern and southern areas, and the seasonal variation in the south no longer exists to the degree it did in the past (see Tables 3a through 3d). This alternative furthers the goals and objectives of the HMS FMP and is consistent with the Magnuson-Stevens Act and the National Standard Guidelines.

4.1.6 Alternative 6: Adjust Coastwide Target Catch Requirements to 1,500 lbs. of Other Catch to Retain One BFT, and 6,000 lbs. of Other Catch to Retain Two BFT

This alternative would adjust the target catch requirements to allow pelagic longline

vessel in all areas to land one BFT per trip, provided they also land 1,500 lbs. of other catch from the same trip, or two BFT per trip, provided they also land 6,000 lbs. of other catch from the same trip. As with the no action/status quo alternative, this alternative is considered and analyzed under the existing 34° N. Latitude boundary line and alternative 31° N. Latitude boundary line described in Section 4.2.2 (Approach 2, Preferred Alternative).

Ecological Impacts

This alternative is similar to Alternative 5 in that it would establish a coastwide minimum target catch requirement to retain BFT, but differs from Alternative 5 in that it would lower the minimum target catch requirement to retain one BFT to 1,500 lbs. In the northern area, about 79 percent of pelagic longline trips landed 1,500 lbs. of target catch during 1998-2000. In the southern area, year round, about 72 percent of pelagic longline trips landed 1,500 lbs. of target catch during the same time period.

Applying the estimation methodologies discussed in the no action/status quo alternative, this alternative would result in the discarding of 141 BFT in the northern area, a decrease of 42.4 percent from the status quo, and would result in longline landings of about 136 BFT (28.1 mt). In the southern area, this alternative would result in the discarding of 441 BFT, a decrease of 21.1 percent from the status quo, and would result in longline landings of about 329 BFT (80.1 mt). Coastwide, this alternative would result in the discarding of 582 BFT, a decrease of 27.5 percent from the status quo, and would result in landings of about 465 BFT (108.2 mt). Including Georgia and South Carolina in the northern area, under the alternative 31° N. latitude boundary line, would not change estimated landings and discards coastwide, because this alternative would impose identical target catch requirements in both areas. Using 40 and 70 percent mortality estimates for discards (from logbook and observer reports respectively), this alternative would result in a range of 233 and 407 BFT discarded dead coastwide, depending on the mortality estimate used. This alternative would reduce dead discards of BFT and have a positive impact in the western BFT stock by reducing overall mortality.

This alternative would allow longline vessels that land their catch in all areas to retain BFT on more of their trips, and would generally allow them to retain more BFT on most trips. The amount of BFT landed would approach the overall current quota levels of the Longline category (about 110 mt). This alternative would address the target catch requirements in both the northern and southern areas, and would address the fact that most longline trips that catch BFT catch more than one. This alternative would modify the target catch requirements more than other alternatives considered. As with the other alternatives that modify the target catch requirements, this alternative possibly could increase the incentive for longline vessels in the northern area to direct fishing effort on BFT. While such a result may be unlikely, if it were to occur, BFT landings by pelagic longline vessels could exceed the Longline category quota and a subsequent closure could result in increased discards.

Social and Economic Impacts

This alternative would positively impact revenues in the pelagic longline fishery. As described in the RIR, this alternative would increase the landings and gross revenues from BFT for pelagic longline vessels coastwide by approximately 72 percent.

Similar to Alternative 5, this alternative is less complex than other alternatives considered, in that the target catch requirements would not vary by region or during the year. Uniformity in the target catch requirements would make them more easily understood, and could make the regulations easier to enforce. Lowering the target catch limit to 1,500 lbs. may have the unlikely effect of triggering an incentive to target BFT which would be contrary to the letter and intent of the regulations and may increase the burden and activity with regulatory enforcement. Rapid use of the available quota may also mean premature closure with corresponding negative social and economic impacts to those vessels that catch and have to discard a BFT after the quota has been attained and the category closed.

Conclusion

This alternative is not preferred at this time. While it does address the target catch requirements in all areas, it may modify them to a level at which the Longline category could land more than its quota. If the Longline category exceeded its quota, a closure would likely increase discards of BFT, contrary to the objective of reducing discards.

4.2 Approach Two: Moving the North/South Boundary Line and Reallocating Quota between Areas

NMFS considered three alternatives regarding the North/South boundary line and reallocation of the Longline category BFT quota. The purpose of moving the North/South boundary would be to find a boundary line that better reflects the seasonal and other differences in the northern and southern fisheries, consistent with the objectives of reducing discards and preventing directed fishing while allowing landings of incidental BFT catches. For example, seasonal differences in BFT migration patterns between northern feeding migrations and southern spawning migrations affect fishing interaction rates and the condition of the fish in terms of fat content and ability to survive the capture experience. Any boundary line should account for such seasonal differences in the fisheries and correspond with interaction rates to ensure that catches are incidental and do not result in excess discards. In addition, any boundary line should not be near an area where fish are usually landed, i.e., it should be clear that fish caught in a particular area will be landed in that area. Reallocating the quota between the two zones would be necessary to adjust for any increase/decrease in the size of each zone based on the location of the boundary line. The three alternatives considered are discussed below.

4.2.1 Alternative 1: No Adjustment in Longline Category North/South Boundary Line or

Subquotas (No Action/Status Quo)

This alternative would maintain the status quo, with the North/South boundary line at 34° N. latitude, and the quota allocation between the two areas at 78.9 percent for the southern area and 21.1 percent for the northern area.

Ecological, Social, and Economic Impacts

The no action alternative would not have direct ecological impacts because it is not expected to change current fishing effort or practices. Maintaining a boundary line would ensure that any seasonal variations in catch rates or fishing practices in one fishing area would not consume all the incidental longline quota, thereby causing a closure and subsequent discards in the other area. However, the current boundary line and quota allocation do have social and economic impacts. Because the current boundary line is in an area where there is longline activity, there has been confusion among fishermen and tuna buyers as to whether vessels are fishing under the regulations/quota for the northern area or the southern area. NMFS has received public comment on several occasions over the last several years that the current position of the boundary line between the northern and southern areas (34° N. latitude) causes confusion, especially for those vessels that land just north of the line where regulations require more target catch, and does not meet the objective of reducing discards and rebuilding overfished BFT.

Conclusion

The no action/status quo alternative is not preferred at this time because the current Longline category boundary line is in an area with longline activity, and has caused confusion regarding the applicability of the northern or southern regulations/quotas.

4.2.2 Alternative 2: Move North/South Boundary Line to 31°00' N. latitude, and Change Subquota Allocation to 60/40 Percent for the Southern/Northern Areas (Preferred Alternative)

This alternative would move the Longline category North/South boundary line to 31° 00' N. latitude near Jekyll Island, Georgia, and adjust the Longline category subquotas to allocate 60 percent to the southern area and 40 percent to the northern area.

NMFS propounded a 70:30 subquota allocation in the proposed rule based on historical landings relative to the shift in boundary, but received public comment that closed areas south of the division line had resulted in recent northward effort shifts. An analysis of the logbook data using number of hooks set as a proxy for fishing effort (Table 10) shows that a 60:40 split more accurately reflects the actual distribution of fishing effort for the most recent year of data

available (2001). Fishing methodology between the northern and southern longline fisheries varies in the number of sets per year and number of hooks per set. Therefore, the best way to estimate fishing effort with the logbook data available is by summarizing the total number of hooks set per year.

Ecological, Social, and Economic Impacts

This alternative does not have direct ecological impacts, because it is not expected to change current fishing effort or practices. Previous rulemaking that resulted in actions such as closed areas have already analyzed any ecological impacts and results of effort shifts. This action would not alter these prior analyses. As with the no action/status quo alternative, maintaining a boundary line would ensure that any seasonal variations in catch rates or fishing practices in one fishing area would not consume all the incidental longline quota, thereby causing a closure and subsequent discards in the other area. This alternative would have positive social and economic impacts. As mentioned above, NMFS has received public comment on several occasions that the current position of the boundary line between the northern and southern areas (34° N. latitude) causes confusion, is unfair (especially for those vessels that land just north of the line where regulations require more target catch), and does not meet objectives of reducing discards and rebuilding overfished BFT. To minimize potential confusion among fishermen and tuna dealers, a boundary line should be in an area of little longline activity. This 34°00' N. latitude boundary line alternative would achieve this goal, as there have been very few landings of BFT in Georgia. This alternative would slightly adjust the quota subdivision to reflect the additional landings likely to be applied to the northern area.

Conclusion

This is the preferred alternative. This alternative would maintain a boundary line between the northern and southern areas to prevent one area from consuming all the incidental longline quota, but would move the boundary line to an area with little longline fishing activity nearby, and would adjust the longline quota subdivision to reflect the change in areas. This alternative furthers the goals and objectives of this rulemaking and the HMS FMP, and is consistent with the Magnuson-Stevens Act and the National Standard Guidelines.

4.2.3 Alternative 3: Eliminate North/South Boundary Line and Establish One Longline Category Quota for All Areas

This alternative would eliminate the Longline category North/South boundary line and subquotas and would establish a single Longline category quota applicable to all areas.

Ecological, Social, and Economic Impacts

This alternative could have negative ecological impacts if seasonal variations in one fishing area led to high BFT catch rates and all the incidental longline quota was landed in that

area, thereby causing a closure with subsequent discards in the other area. The social and economic impacts of this alternative could also be negative if a closure occurred and fishermen were unable to land any incidentally caught BFT. While BFT landings constitute a small percentage of the gross revenues of pelagic longline fishery as a whole, the revenues to those individual fishing operations that are able to land BFT can be substantial. The inability to land any BFT should not incur any costs (because BFT are an incidentally caught species) but the loss of potential revenues would be wasteful and may increase incentive to circumvent regulations.

Conclusion

This alternative is not preferred at this time. This alternative could result in a Longline category closure with associated increased discards and loss of potential social and economic benefits of truly incidentally caught BFT.

4.3 Approach Three: Inseason Adjustment Authority for Target Catch Requirements

This section evaluates the three alternatives that NMFS considered regarding inseason authority to adjust the BFT retention limits for longline vessels.

The purpose of providing NMFS inseason adjustment authority for BFT retention by longline vessels would be to increase the likelihood of meeting the management objectives for the BFT fishery on an inseason basis. Pelagic longline fishery interaction rates with BFT vary over relatively short time frames (within a season) as well as over longer time frames (across years or decades). Notice and comment rulemaking, which NMFS has undertaken numerous times (see Section 1), is a lengthy process and cannot address excess discards on a real-time basis. Without inseason adjustment authority, if landings rates were high and the available data indicated that a quota or subquota would be met before the end of the fishing year, NMFS could not modify the BFT limit for longline trips within a season and the available quota may be exceeded. Conversely, if landings rates were low, without inseason adjustment authority, NMFS could not modify BFT retention limits to allow more retention of incidental catches. Inseason adjustment authority would allow NMFS to respond to variations in catch rates in real time, reduce the risk of exceeding available quota, and meet the objectives of reducing discards and allowing retention of incidentally caught BFT.

4.3.1 Alternative 1: No Inseason Adjustment Authority (No Action/Status Quo)

This no action/status quo alternative would maintain current regulations under which NMFS has no inseason authority to adjust the amount of BFT that could be retained by longline vessels on a trip. Limits and target catch requirements are fixed in the regulations, and NMFS could only close the fishery if the BFT Longline quota (or area subquota) was reached.

Ecological Impacts

This alternative would likely have minimal ecological impacts, as the retention of BFT

by longline vessels would be controlled by target catch requirements and quotas. However, this alternative could have negative ecological impacts if, for example, NMFS adopted the preferred alternative under Approach One to modify the target catch requirements and landings of BFT by longline vessels were greater than expected. Under current regulations, NMFS could not close the fishery until the quota or subquota were met, and after a closure, discard mortality would continue. Thus, not having the inseason authority to modify BFT retention by longline vessels could result in excessive catches in a particular area (e.g., the Gulf of Mexico), which could have negative ecological impacts.

Social and Economic Impacts

This alternative would limit NMFS' ability to prevent BFT Longline quota from being landed in a short period of time, which could result in a closure of the longline fishery for the remainder of the fishing year. A closure could have negative impacts on vessels that would usually be able to retain a certain amount of incidentally caught BFT.

Conclusion

This alternative is not preferred at this time. It does not provide NMFS with the ability to modify BFT retention limits by longline vessels in order to slow or increase catch rates, which could have negative ecological, social, and economic impacts.

4.3.2 Alternative 2: Provide NMFS with Inseason Adjustment Authority to Adjust the BFT Retention Limits by Number of Fish Only

This alternative would provide NMFS with inseason authority to adjust the BFT retention limits for pelagic longline vessels from a range of zero to three fish per trip. NMFS would be able to adjust the limits through an inseason action, with 30 days public notice. This authority would be similar to the inseason authority NMFS has to adjust the General category BFT daily retention limit from zero to three BFT per vessel. This alternative would not provide NMFS the inseason authority to adjust the minimum target catch requirements for BFT retention (e.g., 3,500 lbs. to 3,000 lbs.).

Ecological Impacts

The ecological impacts of this alternative would be minimal, in that overall mortality of BFT is controlled by quotas. This alternative could reduce mortality, however, if inseason authority were used to slow landings so that the longline quota were not closed and all incidentally caught BFT would have to be discarded.

Social and Economic Impacts

This alternative could prevent NMFS from having to completely eliminate retention of BFT by longline vessels, and thus could prevent negative impacts. If this inseason authority were not available, NMFS could not stop longline vessels in a particular area from landing the entire quota or subquota during a short period of time, which would not be equitable for those vessels that fish in other areas and would not be allowed to retain any BFT.

Conclusion

This alternative is not preferred. While it provides NMFS with the authority to adjust retention limits within a season, as it has in other BFT quota categories (General and Angling), it does not provide NMFS with the authority to adjust the minimum target catch requirements. NMFS believes that the ability to adjust both the retention limits (by number) and the minimum target catch requirements (by weight) would better enable inseason management than the ability to adjust retention limits alone.

4.3.3 Alternative 3: Provide NMFS with Inseason Adjustment Authority to Adjust the BFT Retention Limits by Number of Fish and the Target Catch Requirement by Weight (Preferred Alternative)

This alternative would provide NMFS with inseason authority to adjust the BFT retention limits for pelagic longline vessels by number from a range of zero (closure) to three BFT per trip and by weight within 25 percent of the target catch requirements (e.g., 2,000 lbs. to 2,500 lbs). NMFS would be able to adjust the limits through an inseason action, with at least 21 days public notice. Initially, NMFS proposed a 30 day public notice period. During the public comment period on the proposed rule, the public noted that the highly migratory nature of BFT could result in rapid changes of fishing gear interaction rates. In order for in-season adjustments to work effectively, NMFS must respond quickly. However, NMFS is concerned about providing adequate notice of changes to fishing vessels at sea. Therefore, NMFS has modified the public notice period to provide for at least 21 days of notice, which is the expected trip length for larger vessels fishing further offshore. This authority would be similar to the inseason authority NMFS has to adjust the General category BFT daily retention limit from zero (closure) to three BFT per vessel.

Ecological Impacts

The ecological impacts of this alternative would be minimal, in that overall mortality of BFT is controlled by quotas. This alternative could reduce mortality, however, if inseason authority were used to slow landings so that the longline quota were not closed and all incidentally caught BFT would have to be discarded.

Social and Economic Impacts

This alternative could prevent NMFS from having to completely eliminate retention of BFT by longline vessels, and thus could prevent negative impacts. If this inseason authority

were not available, NMFS could not stop longline vessels in a particular area from landing the entire quota or subquota during a short period of time, which would not be equitable for those vessels that fish in other areas and would not be allowed to retain any BFT.

Conclusion

This alternative is preferred because it provides NMFS with the authority to adjust retention limits in season by number, as it has in other BFT quota categories (General and Angling), as well as by weight. This alternative could eliminate the negative effects of a premature closure of the Longline BFT quota or subquota. This alternative furthers the goals and objectives of this rulemaking and the HMS FMP, and is consistent with the Magnuson-Stevens Act and the National Standard Guidelines.

4.4 Cumulative Impacts of the Alternatives Considered

The 1999 HMS FMP adopted ICCAT's 20-year stock rebuilding program for western BFT, which included, among other things, landings and dead discard quotas and inseason authority to open and close the fishing season and transfer quotas between BFT fishing categories. Among other things, ICCAT has recommended that BFT dead discards be minimized. The Revised Final Environmental Impact Statement (FEIS) for the HMS FMP concluded that the cumulative long-term impact of the final actions, which included the BFT rebuilding program, would be to establish sustainable fisheries for Atlantic HMS. (See Section 1.1 for a complete history on past impacts to the pelagic longline fishery regarding BFT and target fisheries).

Present impacts include the recent publication, in July 2002, of a final rule and Final Supplemental Environmental Impact Statement (FSEIS) to implement a June 14, 2001, BiOp that addresses reduction of sea turtle bycatch and bycatch mortality in HMS fisheries. Some of the measures adopted in the final rule are expected to have positive, but varying degrees of, direct, indirect, and cumulative impacts on sea turtle populations. Certain measures, such as the closure of the Northeast Distant Area (NED), are expected to have negative direct, indirect, and cumulative economic and social impacts, which are mitigated in the short-term for vessels that participate in an experimental fishery in the NED. Other reasonably foreseeable future actions include preparation of the annual specifications for the BFT fishery including establishment of quotas for each of the domestic fishing categories, and a regulatory amendment to address aspects of the commercial BFT fishery including start and opening dates of various fishing categories. This action would be consistent, and assist, with the future specifications and regulatory amendment, which are currently under consideration.

In the foreseeable future NMFS plans on preparing an FMP amendment regarding the BFT fishery and management plan as well as gathering results from the NED experiment. The current action would be consistent with these future activities and results and would provide useful information regarding landings and discards of BFT that could be dovetailed and used in the development of these future activities and analyses.

Overall, the alternatives considered in this EA/RIR/FRFA, which include adjustments to target catch requirements, the North/South boundary line and subquotas, and inseason authority, are not expected to change current fishing practices or cause impacts not previously addressed in the HMS FMP's Revised FEIS and the July 2002, FSEIS for sea turtle bycatch. Thus, NMFS considers that this action is consistent with past and current actions, and anticipates that it also will be consistent with future actions with no adverse, cumulative impacts on the environment from the preferred alternatives. As described in the discussion of the alternatives (See Section 4), NMFS expects that the preferred alternatives would have modest positive ecological, social, and economic impacts.

5.0 Regulatory Impact Review

Under Executive Order (EO) 12866, Federal agencies are required to “assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. . . Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.” In compliance with EO 12866, the Department of Commerce and the NOAA require the preparation of a RIR for all regulatory actions that either implement a new FMP or significantly amend an existing plan, or may be significant in that they reflect agency policy and are of public interest. The RIR is part of the process of preparing and reviewing FMPs and regulatory actions and is intended to provide a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way.

Additionally, the Small Business Regulatory Enforcement and Fairness Act of 1996 amended the Regulatory Flexibility Act (RFA) and made compliance with the RFA subject to judicial review. The purpose of the RFA is to require agencies to assess the impacts of their proposed regulations on small entities and is intended to encourage Federal agencies to utilize innovative administrative procedures when dealing with small entities.

This section of this document assesses the economic impacts of the alternatives considered in the development of this rulemaking. However, certain elements required in an RIR are also required as part of an EA. Thus, this section should only be considered part of the RIR. The rest of the RIR can be found throughout this document. Section 1 of this document describes the need for action and the objectives of the regulations. Section 3 of this document provides a description of the fishery that could be affected by the final rule. The alternatives considered are described in Section 2, and analyzed in Section 4, including modifications to the target catch requirements for BFT retention by pelagic longline vessels, adjustment of the boundary line and subquota allocations between northern and southern areas, and providing

NMFS with inseason authority to modify retention limits of BFT by longline vessels.

This section focuses on the impacts of the final rule on the pelagic longline fishery. The primary target species of that segment of the pelagic longline fishery is swordfish. Other segments of the pelagic longline fishery constitute a mixed fishery with swordfish, bigeye tuna, yellowfin tuna, and albacore constituting the target species. In addition to the fishermen, the related industries including dealers, processors, bait houses, and equipment suppliers are also part of this fishery.

5.1 Analyses of Alternatives

The alternatives presented in this EA/RIR/FRFA to modify the target catch requirements for BFT retention for pelagic longline vessels should increase vessels' landings and revenues from BFT. BFT is a species caught incidentally by pelagic longline vessels, and it is assumed that no additional costs are incurred by longline vessels that catch them, so any increases in gross revenues would be increases in net revenues. The alternatives to provide NMFS with inseason authority to modify BFT retention limits by pelagic longline vessels should not have any direct impact on revenues, but could help prevent the negative impacts of potential future closures when area quotas have been reached.

5.1.1 Impacts on Fishermen

To assess the impacts of the alternatives on revenues throughout the fishery, the number of BFT that is estimated to be landed under each alternative was multiplied by the average weight of the BFT landed in 2000 (by area landed), which was then multiplied by the average price per pound for longline caught BFT in 2000 (again by area landed) to produce an estimate of revenues from BFT for each alternative. This was compared with the status quo to determine the percentage change in revenues. As described above, two estimates of status quo landings are used for comparative purposes in the northern area. The first is an estimation calculated using the method used to estimate landings under the various alternatives to change the target catch requirements; the second is actual landings from 2000. The estimated revenues from BFT landings for the various alternatives are shown in Table 9.

The preferred alternatives would increase the revenues from BFT in the pelagic longline industry by approximately 61 percent. As BFT catch is incidental to longline operations, vessels should incur no additional costs. Overall gross revenues for the Atlantic pelagic longline fishery are estimated to be approximately \$29 million per year (NMFS 2002a). The changes in revenues due to the preferred alternative would be about \$450,000.00, or about 1.1 percent of total gross revenues in the fishery. However, as all revenues from BFT could be considered net revenues because they are an incidentally caught species, an increase of \$450,000.00 in net revenues could be significant for the longline fishery as a whole, particularly given the cumulative impacts of recent conservation and management actions that affect these fishery participants (e.g., closed areas, gear modifications). As mentioned above, the preferred alternative that provides NMFS with inseason authority to modify BFT retention limits by pelagic longline vessels should not

have any direct impact on revenues, but could help prevent the negative impacts of closures that occur when area quotas are reached.

5.1.2 Impacts on Seafood Dealers

NMFS has little data regarding the wholesale price of fish or the costs to fish dealers or processors. However, NMFS does have information on the weight of fish that dealers buy from fishermen. In 2000, dealers purchased 56 BFT from vessels in the northern area, and 211 BFT from vessels in the southern area. The preferred alternative for adjusting the target catch requirements would almost double the number of bluefin bought in the northern area and would increase the number of BFT purchased in the southern area by about 25 percent.

Table 6 indicates the number of BFT landed under each alternative for adjusting the target catch requirements. In general, seafood dealers would be expected to benefit from the increase under Target Catch Alternatives 2-6, however, without wholesale price information available, it is difficult to understand the magnitude of the positive economic impact. Under Target Catch Alternatives 4 through 6, dealers who purchase BFT caught either in the northern or the southern areas would benefit. Under other alternatives, dealers purchasing southern area-caught BFT would not be affected. The preferred alternative to provide NMFS with inseason authority to modify BFT retention limits by pelagic longline vessels should not have any direct impact on revenues to seafood dealers, but could help prevent the negative impacts of closures that occur when the area quotas are reached.

5.2 Conclusion

The preferred alternatives described in this EA/RIR/FRFA have been determined to be not significant for the purposes of EO 12866, as they would increase revenues in the pelagic longline fishery without any anticipated adverse economic impacts on fishermen, communities, or the economy generally, or any anticipated adverse environmental impacts. A summary of the expected net economic benefits and costs of each alternative can be found in Table 11.

6.0 Final Regulatory Flexibility Analysis

NMFS has prepared a Final Regulatory Flexibility Analysis (FRFA) to analyze the impacts on small entities of the alternatives for adjusting the target catch requirements, as described in Sections 2.1 and 4.1 of this document. Section 1 of this document describes the reasons why action is being considered and includes the objectives of, and legal basis for, the final rule. None of the preferred alternatives or alternatives considered would alter reporting, record-keeping, or other compliance requirements currently in place.

The analysis for the FRFA assesses the impacts of the various alternatives on the vessels that participate in the Atlantic pelagic longline fishery, all of which are considered small entities. In order to do this, NMFS has estimated the average impact that the alternatives to modify the

target catch requirements would have on individual vessels. As mentioned above, the annual gross revenues from the Atlantic pelagic longline fishery are approximately \$29 million. There are approximately 171 pelagic longline vessels that are permitted to retain Atlantic tunas and swordfish, and average annual gross revenues per vessel are approximately \$172,000 (NMFS 2002a). The analyses for the FRFA assume that all pelagic longline vessels have similar levels of catch and gross revenues. While this may not be true, the analyses are sufficient to show the relative impact of the various alternatives on vessels. NMFS has, however, separated out pelagic longline vessels into three groups: vessels home-ported in the northern area that landed more than one BFT on an individual trip during 1998-2000; vessels home-ported in the northern area that landed one or less BFT on individual trips during 1998-2000; and vessels home-ported in the southern area. Northern area vessels were separated into two groups because Alternative 2, described in Sections 2.1.2 and 4.1.2, would have a negative impact on the vessels that landed more than one BFT on a particular trip, as it would only allow retention of one BFT per trip in the northern area, whereas the status quo does not limit the number of BFT so long as the percentage of BFT did not exceed two percent of the weight of the other landings. During 1998-2000, six vessels landed more than one BFT on individual trips, and two vessels landed two BFT twice (total of eight trips). For these analyses, NMFS assumed that these six vessels would each have a trip in which they would have been able to land two BFT under the status quo.

Table 12 shows the change in gross revenues that could be expected on annual basis for a vessel in the pelagic longline fishery as a result of the various alternatives to modify the target catch requirements. The impacts on vessels were estimated by calculating the difference in the number of BFT that could be retained by the particular group of vessels, multiplying that number of fish by the average weight and price per pound for that area during 2000. In the northern area, the average weight of BFT landed by longline vessels in 2000 was 456 lbs., and the average per pound was \$5.56, for an estimate of \$2,535 per fish. In the southern area, the average weight of BFT landed by longline vessels in 2000 was 537 lbs., and the average price per pound was \$5.31, for an estimate of \$2,851 per fish. For Alternative 4.1.2, vessels in the northern area would land 72 BFT, 16 more than were landed in 2000. Using the average weight and price information for the northern area, the revenues from the additional 16 fish were divided among the 102 vessels in the northern area, for an average increase in gross revenues of \$398 under the existing north/south boundary line, and an increase of \$634 under the changed boundary described in Alternative 4.2.2. For the six vessels that could have landed two BFT on a trip however, these vessels would lose the revenues from the second BFT, \$2,535. Thus, under the current boundary line, the change in gross revenues for each of these six vessels would be -\$2,137 (\$398 - \$2,535), approximately a -1.2% change. Vessels in the southern area would not experience any change in revenues under this alternative, as the target catch requirements would not change. As noted in Table 12, the impacts on revenues for the other alternatives were estimated in a similar manner. Other than Alternative 4.1.2, none of the target catch alternatives would have a negative impact on any vessel in the pelagic longline fishery under the existing or preferred alternative boundary line (Alternative 4.2.2). Alternatives 4.1.2 and 4.1.3 would have a positive impact on all but a few vessels. Alternatives 4.1.4, 4.1.5 (preferred alternative), and 4.1.6 (Target Catch Alternatives 4, 5, and 6) would have a positive impact on revenues for vessels in all areas. Thus, only one non-preferred alternative considered would have negative

economic impacts; all preferred alternatives would minimize current negative impacts such that consideration of significant alternatives to minimize impacts to small entities is unnecessary.

The alternatives regarding providing NMFS with inseason authority to modify BFT retention limits by pelagic longline vessels should not have any direct impact on small entities. The preferred alternative, however, which would provide NMFS with this inseason authority, could help prevent negative impacts on small entities due to closures.

Public comment on the Initial Regulatory Flexibility Analysis (IRFA) and draft EA was generally favorable and encouraged the agency to expeditiously proceed to final action and implementation. Overall the comments suggested two changes to the preferred alternatives to further meet the objectives of the rulemaking. One change involved adding a third tier of target catch requirements to allow the landing of a third BFT to further reduce discards on the rare occasions that three BFT are caught. Another suggested change was for the agency to modify the subquota allocations between the northern and southern areas although a range of opinion was received as what specific percentages should apply. In both cases the agency has modified the preferred alternative to further meet the objectives of the rulemaking and to further minimize any negative or social impacts. For a summary of specific comments and agency responses see Section 11.

7.0 Mitigating Measures

The preferred alternatives would assist NMFS in achieving the objectives of (1) reducing BFT discards in the Atlantic pelagic longline fishery (2) without providing an incentive to target BFT and (3) allowing for landings of incidentally caught BFT within available quota, as well as provide NMFS authority to make inseason adjustments to meet those objectives. The preferred alternatives would reduce overall mortality of overfished BFT, reduce discards consistent with ICCAT recommendations and Magnuson-Stevens Act requirements, and increase benefits to the Atlantic pelagic longline fishery. With inseason adjustment authority, NMFS will be able to monitor and make adjustments to the fishery closer to “real time.” Since NMFS will continue to monitor the fishery, any unpredicted increase in landings or discards of BFT, should they occur, could be addressed within a fishing season. NMFS will also continue to monitor and implement the terms and conditions of the BiOp dated June 14, 2001, and based on the results of impacts to the longline fleet, as well as target and non-target species, consider modification of future actions accordingly.

8.0 Unavoidable Adverse Impacts

There are no measurable unavoidable adverse impacts associated with the preferred alternative.

9.0 Irreversible and Irretrievable Commitment of Resources

There are no measurable irreversible or irretrievable commitments of resources associated with the final action.

10.0 FINDING OF NO SIGNIFICANT IMPACT

NOAA's National Marine Fisheries Service (NOAA Fisheries) submitted the regulatory amendment to the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (HMS FMP) for Secretarial review under procedures of the Magnuson-Stevens Fishery Conservation and Management Act. This final rule is accompanied by an integrated document that includes an Environmental Assessment (EA), Regulatory Impact Review, and Final Regulatory Flexibility Analysis. Copies of the rule and the supporting document are available from Brad McHale at the Highly Migratory Species Management Division, NMFS-Northeast Regional Office, One Blackburn Drive, Gloucester, MA 01930, (978) 281-9260, or from our website at www.nmfs.noaa.gov/sfa/hmspg.html.

The final rule would adjust target catch requirements to minimize dead discards of BFT by pelagic longline vessels and would allow for landing of additional BFT by such vessels. The EA considers information contained in the Environmental Impact Statement (EIS) associated with the HMS FMP (NMFS, 1999) and the 2003 HMS Stock Assessment and Fishery Evaluation for Atlantic Highly Migratory Species (SAFE) Report (NMFS, 2003).

NOAA Administrative Order 216-6 identifies nine criteria, in addition to the Council on Environmental Quality's regulations at 40 C.F.R. § 1508.27, for determining the significance of the impacts of an action:

- (1) *Can the action be reasonably expected to jeopardize the sustainability of any target species that may be affected by the action?*

This action is not expected to jeopardize the sustainability of swordfish, bigeye tuna and yellowfin tuna, which are the primary target species of pelagic longline operations affected by this action because effort is not expected to change as a result of this action. This action is expected to reduce dead discards of BFT caught incidentally to swordfish and other tuna longlining operations by approximately 25%, which is a management objective of the HMS FMP and part of a management recommendation for BFT adopted by the International Commission for the Conservation of Atlantic Tunas (ICCAT). For example, as stated in Section 4, under Approach 1, Preferred Alternative 5, adjusting the target catch tolerances would allow more BFT to be landed (437) than under the status quo (228) as well as less discarded.

- (2) *Can the action be reasonably expected to jeopardize the sustainability of any non-target species?*

The action is not expected to jeopardize the sustainability of any non-target finfish species. This action is expected to have positive impacts to the BFT stock due to a reduction of dead discards and overall mortality from incidentally caught BFT during longline operations. Overall mortality is likely to decrease as discards that would previously not have counted against the longline quota will now be deducted as landings. Less longline quota would then be available and considered "unused" for transfer to other BFT fishery categories where it would have been

applied to account for additional fishing mortality. For example see Section 4, for how the preferred alternatives recognize the existing fishing patterns and accommodate without change current fishing practices. It is possible that this action could result in increased targeting of BFT. However, this is unlikely given the costs/benefits associated with pelagic longline fishing directed at BFT and the maintenance of target catch requirements. There would not be adverse impacts to other non-target species or the fishery overall because longlining effort is not expected to change as a result of this action.

- (3) *Can the action be reasonably expected to allow substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?*

Because this action is not expected to change fishing practices or effort, this action is not expected to change the impact on EFH or to allow substantial damage to ocean and coastal habitats and/or EFH. Because the action would not change longline activity, there would be no change in impacts on essential fish habitat relative to the status quo. Further, the effects of this action would not apply to any sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural or historical resources. Should such structures or resources be located in the Exclusive Economic Zone (EEZ), longline vessels would already avoid those areas to avoid potential gear loss.

- (4) *Can the action be reasonably expected to have a substantial adverse impact on public health and safety?*

The action is not expected to have substantial adverse impacts on public health and safety. Fishing activity or behavior would not change and fishing effort would not expand as a result of this action.

- (5) *Can the action be reasonably expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species?*

The action is not expected to alter current impacts on threatened or endangered species. The action would not modify fishing behavior or gear type, nor would it expand fishing effort. Longlines are known to present potential dangers to listed sea turtles and marine mammals, and the activity of the fishery operates under the terms of a Biological Opinion (BiOp) dated June 14, 2001. The agency is implementing the BiOp pursuant to a final rule published on July 9, 2002 (67 FR 45393), which among other matters restricts and monitors operations of longline vessels to reduce interactions with sea turtles.

- (6) *Can the action be reasonably expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?*

The action is not expected to result in cumulative adverse effects that could have a substantial effect on target species or non-target species. The action modifies existing target catch requirements for the highly regulated Atlantic pelagic longline fishery, which should have positive cumulative ecological, social, and economic impacts. This action would be consistent with ongoing implementation of rebuilding plans for target species such as swordfish as well as non-target species such as BFT and the final rule to implement the BiOp for sea turtles. The action is not expected to change current fishing practices or effort or cause impacts not previously addressed in the above rebuilding plans and rulemakings.

- (7) *Can the action be reasonably expected to have a substantial impact on biodiversity and ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?*

The action is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area, because the action is not expected to change fishing activity or practices, landings of target species, and interactions with non-target and endangered or threatened species. The action would not affect unique geographic areas, other than those areas which have been delineated since target catch levels were established. In addition this action is not expected to introduce or spread non-indigenous species.

- (8) *Are significant social or economic impacts interrelated with significant natural or physical environmental effects?*

The final actions are not expected to have any significant, positive or negative, social or economic impacts. The preferred actions are expected to have modest positive social and economic impacts in the northern and southern areas, as currently identified in the regulations, by reducing dead discards and allowing fishermen to land more BFT caught incidentally to swordfish and other tuna longlining operations. See Sections 5 and 6 for an analysis of the predicted economic impacts to the pelagic longline fishery and small business entities.

- (9) *To what degree are the effects on the quality of the human environment expected to be highly controversial?*

The final actions are not expected to be highly controversial on the human environment. Current target catch requirements for BFT caught incidentally to pelagic longline operations result in increased bycatch in this fishery and loss of gross revenues. Pelagic longline fishermen are not permitted to target BFT and no increase in targeting of BFT is predicted from this action. In this document, NMFS has developed alternatives to modify target catch requirements so that fewer BFT would be discarded and more BFT could be landed, without providing an incentive for targeted BFT trips. The alternatives considered in the EA would thus increase economic benefits to fishermen and minimize bycatch in the longline fishery. The alternatives considered would

have some positive impact on the BFT stock by reducing dead discards and reducing total mortality, although total landings are not expected to change because the fishery is managed under a total allowable catch system. None of the considered alternatives would likely affect fishing behavior or expand effort in the longline fishery since BFT are caught incidentally to targeted operations for swordfish and other tunas. Moreover, fishery participants have been requesting such an action for several years and are expected to support this action. This action has been discussed extensively by the NMFS Highly Migratory Species Advisory Panel (HMS AP), which is composed of representatives from the recreational and commercial fishing industries, the environmental community, academia, and regional and state fishery management authorities. At the recent HMS AP meeting in February 2003, and during the comment period on the proposed rule, public comment was generally favorable and urged the agency to proceed with the final action. The agency did not receive any adverse comments regarding impacts to the environment or protected species and comments were not controversial from an environmental perspective. (See Section 11.0 for a summary of comments and agency responses on this proposed action).

Summary

For the reasons stated above, implementation of this regulatory amendment, which would modify target catch requirements for landing western BFT in the Atlantic pelagic longline fishery and provide NMFS with inseason authority to modify BFT retention limits by pelagic longline vessels, would not significantly affect the quality of the human environment, and preparation of an EIS on the action is not required by Section 102(2)(c) of National Environmental Policy Act or its implementing regulations.

Approved: Rebecca Lent
for Assistant Administrator for Fisheries

May 15, 2003

11.0 Summary of Public Comments and Agency Responses to Draft EA/RIR and IRFA

Comment: Numerous comments supported establishing a target catch requirement in terms of a specific weight versus a percentage to allow for the retention of incidentally caught BFT. Comments stated that the pelagic longline fishery has changed since the two percent target was implemented and having one set of target catch limits coastwide will ease the burden on fishermen to comply with regulations. A specific weight tolerance will also assist enforcement agents pursuing infractions.

Response: NMFS agrees. The final action establishes target catch requirements as specific weights, rather than as percentages, with the intent of reducing BFT discards in all areas, and at the same time minimizing confusion and providing positive economic impacts to longline vessels in both southern and northern management areas. NMFS Enforcement has also expressed a preference for a specific target weight regardless of geographic location as it would provide one regulation that is clearer and easier to enforce.

Comment: NMFS should allow for a third and/or fourth tier of target catch to allow vessels to land three and/or four BFT for those vessels conducting longer trips. For example, NMFS should establish a target catch requirement for all areas, at all times of 20,000 lbs. (44,092 kg) to retain three BFT, and of 30,000 lbs. (66,138 kg) to retain four BFT. Other comments suggested NMFS allow full retention of all catch to eliminate all discards and bring the agency into full compliance with the Magnuson-Stevens Act.

Response: NMFS has modified the final action to include a third tier of target catch allowance in the final action, explicitly allowing the retention of 3 BFT with 30,000 lbs. of target catch. This additional tier of target catch is consistent with the previous percentage-based target catch requirements that allowed a few vessels to land three BFT in conjunction with 30,000 lbs. of target catch. The proposed rule for this action would not have allowed these few vessels to retain three BFT regardless of the target catch onboard. Although only a handful of vessels are large enough to complete trips with target catches greater than 30,000 lbs., allowing these vessels to retain three BFT would further meet the intent to reduce discards of BFT and still avoid incentives to target BFT.

Comment: The preferred alternatives may not be providing a reasonable opportunity for pelagic longline vessels to harvest the quota allocated to that category. The inseason adjustment authority should not be limited to a range of zero to three BFT per trip and/or by 25 percent of the target catch requirements.

Response: Under the Atlantic Tunas Convention Act, NMFS is required to provide U.S. fishermen a reasonable opportunity to take the BFT quota allocated to the United States by the ICCAT. Pelagic longline vessels are not allowed to target BFT and thus there is no directed fishery on BFT. However, due to the incidental catch of BFT in pelagic longline operations targeting other species, NMFS has provided a quota and target catch requirements to provide pelagic longline vessels a reasonable opportunity to land their incidentally caught BFT in order to reduce discards and provide positive economic impacts to the pelagic longline fishery.

Comment: Numerous comments stated support for the relocation of the boundary line separating the northern and southern management areas to 31°00' N. latitude, near Jekyll Island, Georgia. This is an area with little longline activity and should reduce confusion regarding the area in which incidental BFT were harvested. Other comments stated that the Gulf of Mexico should be off limits to all retention of BFT by pelagic longline vessels and a boundary line should be established in the Straits of Florida.

Response: NMFS' final action maintains the proposed location of the boundary line at 31°00' N. latitude, near Jekyll Island, Georgia. The intent of the line is to account for seasonal differences in the fisheries within each area and to prevent one area from consuming all available quota. The location of the line was chosen in an area with little longline fishing activity to facilitate enforcement and reporting. Eliminating the incidental retention of BFT by pelagic longline vessels operating in the Gulf of Mexico would not meet the intent of this rulemaking, as it could increase discards, and have negative impacts to pelagic longline fishermen.

Comment: Comments stated support for a reallocation of the Longline category quota based on the new location of the North/South boundary line. Comments suggested the preferred alternative of 30 percent for the northern area and 70 percent for the southern area should be reconsidered. The proposed allocation may not reflect the current fishing patterns of the pelagic longline fishery and may lead to increased effort and mortality on spawning BFT in the Gulf of Mexico, which has been designated by ICCAT as a spawning area in the Western Atlantic Ocean. Some comments suggested NMFS should re-calculate the North/South subquota allocation based on the number of hooks versus the number of sets. Some comments suggested a quota split of 50/50, while others suggested a split of 40 percent for the northern area and 60 percent for the southern area.

Response: Based on the analysis conducted in the Environmental Assessment, Regulatory Impact Review, and the Regulatory Flexibility Analysis, NMFS has determined that an adjustment to the Incidental Longline category subquota allocation between areas is warranted. Due to the movement of the boundary line and the adjustments in the target catch allowances in both the northern and southern areas, and the apparent redistribution of longline effort in response to bycatch reduction measures, NMFS adjusts the Longline category subquota to allocate 60 percent to the southern area and 40 percent to the northern area. This adjustment is made to reflect the estimated additional landings likely to be applied in the northern area based on the above analysis. The amount of BFT landed is expected to approach the subquota levels of the Longline category fishery, but not exceed them.

Comment: Some comments stated that NMFS should increase the number of observers in the Gulf of Mexico pelagic longline yellowfin tuna fishery.

Response: ICCAT requires five percent of the pelagic longline trips to be selected for observer coverage. Vessels are selected based on a random five percent sampling of sets. Actual deployment of observers on vessels in the past had been constrained by a number of factors including logistic requirements and safety concerns and thus it has not been possible to place observers on all selected trips. NMFS is working towards improving observer coverage by increasing the sampling of trips to eight percent and facilitating increased communication between vessel operators and observer program coordinators, particularly in regards to safety

requirements for the placement of observers (see 50 CFR 600.746), and the need to have all safety equipment on board as required by the U.S. Coast Guard.

Comment: Numerous comments stated support for the inseason adjustment authority, but stated that 30-day delayed effectiveness prior to the regulation changes is too long. NMFS should employ a two week notice to be timely responding to resource concerns.

Response: In the proposed rule, NMFS has proposed adjusting the limits through an inseason action, with 30 days public notice. However, NMFS agrees that the highly migratory nature of BFT could result in rapid changes of fishing gear interaction rates. In order for in-season adjustments to work effectively, NMFS must respond quickly. In addition, NMFS is concerned about providing adequate notice of changes to fishing vessels at sea. Therefore, NMFS has reconsidered the balance between prompt action and notification, and reduced the public notice period to 21 days, which is the expected trip length for larger vessels fishing further offshore.

Comment: NMFS should define “target catch” so as to prohibit the landing of unmarketable species just to reach a minimum threshold to retain a BFT and encourage the release of all live BFT caught by pelagic longline vessels.

Response: The current regulations addressing target catch limits at 635.23 (f)(1) state that species other than BFT must be legally caught, retained, and offloaded from the same trip and recorded on the dealer weighout slip as sold. The current regulatory language meets the intent of preventing the landing of unmarketable species just to reach a minimum threshold. In regards to live BFT caught by pelagic longline vessels, NMFS is currently working on a national bycatch strategy. To view the goals, objectives, and strategies please visit www.nmfs.noaa.gov.

Comment: NMFS should consider various physical oceanographic parameters and re-examine the Mid-Atlantic closure area because it is not used as a spawning area. Forcing vessels to move further offshore may produce a safety issue. Other comments stated that, NMFS should analyze data gathered during the Northeast Distant experimental fishery to adjust management measures for the pelagic longline fishery in the future.

Response: NMFS’ intent in creating the Mid-Atlantic closure area was to ensure compliance with ICCAT recommendations to reduce the bycatch and dead discards of BFT by pelagic longline vessels, not to protect a potential BFT spawning area. The available data, based on logbooks submitted by fishermen, indicate a substantial decline in BFT bycatch throughout the year, indicating the closed area may be effective at reducing discards. Although NMFS realizes that it may be necessary to adjust the time and/or area of the closure based on new data including changed physical oceanographic patterns, fishing activity etc., available information does not warrant such changes at this time. NMFS will continue to analyze logbook and observer data from the Northeast Distant experimental fishery in order to consider possible adjustments to target catch requirements for landing BFT by longline vessels, or to make other adjustments as necessary in order to minimize dead discards.

12.0 List of Agencies and Persons Consulted

Discussions relevant to the formulation of the preferred alternative and the analyses for this EA/RIR/FRFA involved input from several NMFS components and constituent groups, including: NMFS Southeast Fisheries Science Center, NMFS Northeast Regional Office, NMFS Enforcement, and the members of the HMS and Billfish Advisory Panels (includes representatives from the commercial and recreational fishing industries, environmental and academic organizations, state representatives, and fishery management councils). NMFS has also received numerous comments from individual fishermen and interested parties.

12.0 List of Preparers/Contact Information

This EA/RIR/FRFA was prepared by Pat Scida, Brad McHale, Margo Schulze-Haugen, and Christopher Rogers from the HMS Management Division, Office of Sustainable Fisheries. Please contact the HMS Management Division, Northeast Regional Office, for a complete copy of current regulations for the Atlantic tunas fisheries.

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13.0 References

- NMFS. 1999. Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks.
- NMFS. 2000. Final Supplemental Environmental Impact Statement for the Regulatory Amendment to the Atlantic Tunas, Swordfish, and Sharks Fishery Management Plan: Reduction of Bycatch and Incidental Catch in the Atlantic Pelagic Longline Fishery. June 14, 2000.
- NMFS. 2000a. National Report of the United States: 2000. SCRS/00/142. 41 pp.
- NMFS. 2001. Stock Assessment and Fishery Evaluation for Atlantic Highly Migratory Species. U.S. Department of Commerce, National Marine Fisheries Service, Silver Spring, MD.
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- NMFS. 2002a. Final Supplemental Environmental Impact Statement for Regulatory Amendment 2 to the Atlantic Tunas, Swordfish, and Sharks Fishery Management Plan: Final Rule to Reduce Sea Turtle Bycatch and Bycatch Mortality in Highly Migratory Species Fisheries. U.S. Department of Commerce, National Marine Fisheries Service, Silver Spring, MD.
- NMFS. 2003. Stock Assessment and Fishery Evaluation for Atlantic Highly Migratory Species. U.S. Department of Commerce, National Marine Fisheries Service, Silver Spring, MD.

14.0 Tables

Table 1: Initial BFT Quotas and Landings in Northern and Southern Domestic Management Areas, in Metric Tons

	1997		1998		1999		2000	
Fishing Area ¹	North	South	North	South	North	South	North	South
Longline Landings ²	19.5	27.3	22.9	23.7	16.9	50.9	11.6	51.3
Initial Longline Quotas	23	86	24	89	24	89	24	89

¹ North/South dividing line is located at 34°00' North latitude.

² Landings from HMS/NERO BFT landings database

Table 2: Longline BFT Dead Discard Estimates by ICCAT Management Area, in Metric Tons, Estimated using Logbook Tallies.

	1997		1998		1999	
ICCAT Area ¹	NWA	GOM	NWA	GOM	NWA	GOM
LL Discards ²	30.7	6.4	57	7	10.1	19.9

¹ NWA = Northwest Atlantic, GOM = Gulf of Mexico

Table 3a. Landings (Other than BFT) in Pounds, by Trip, for Vessels Using Longline Gear, 1998-2000. Source: SEFSC Weighout Data.

	North (NC and North)			South (SC and South)			All Areas		
	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round
Avg.	4,329	7,291	6,778	4,385	4,453	4,430	4,376	5,344	5,053
Median	3,301	4,039	3,787	3,074	3,526	3,336	3,490	3,675	3,501
75 pctl.	1,890	1,808	1,786	1,245	1,384	1,343	1,309	1,518	1,449

Table 3b. Landings in Pounds, by Trip, for Trips not Landing BFT, for Vessels Using Longline Gear, 1998-2000. Source: SEFSC Weighout Data.

	North (NC and North)			South (SC and South)			All Areas		
	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round
Avg.	4,183	6,173	5,801	4,203	4,385	4,327	4,199	4,897	4,696
Median	3,202	3,586	3,474	2,770	3,388	3,128	2,854	3,451	3,228
75 pctl.	1,615	1,644	1,634	1,060	1,344	1,236	1,134	1,416	1,344

Table 3c. Landings (Other than BFT) in Pounds, by Trip, for Vessels Using Longline Gear, 1998-2000. Source: SEFSC Weighout Data.

	North (GA and North)			South (FL and South)			All Areas		
	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round
Avg.	3,747	6,682	6,080	4,559	4,534	4,543	4,376	5,344	5,053
Median	2,881	3,835	3,586	3,220	3,570	3,452	3,490	3,675	3,501
75 pctl.	1,428	1,805	1,718	1,249	1,337	1,301	1,309	1,518	1,449

Table 3d. Landings in Pounds, by Trip, for Trips not Landing BFT, for Vessels Using Longline Gear, 1998-2000. Source: SEFSC Weighout Data.

	North (GA and North)			South (FL and South)			All Areas		
	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round	Jan - Apr	May - Dec	Year Round
Avg.	3,590	5,691	5,232	4,398	4,463	4,441	4,199	4,897	4,696
Median	2,779	3,472	3,253	2,880	3,421	3,217	2,854	3,451	3,228
75 pctl.	1,408	1,662	1,615	1,040	1,268	1,177	1,134	1,416	1,344

Table 4. Number of BFT Reported in the Pelagic Logbook Program as Kept, Discarded Dead, or Discarded Alive.

Month	Area	BFT kept				BFT discarded dead				BFT discarded alive			
		1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
Jan	Closed	0	0	0	0	0	0	0	0	0	0	0	0
	Open	18	9	19	23	5	15	3	2	5	35	8	1
Feb	Closed	0	0	0	0	0	0	0	0	0	0	0	0
	Open	10	10	24	27	1	11	7	30	12	14	9	18
Mar	Closed	0	0	0	0	0	0	0	0	0	0	0	0
	Open	23	17	31	37	4	14	13	106	9	51	27	37
Apr	Closed	0	0	0	0	0	0	0	0	0	0	0	0
	Open	4	14	39	41	2	6	50	90	6	17	39	21
May	Closed	1	1	1	0	2	1	2	0	4	1	20	0
	Open	21	23	25	39	18	21	42	19	26	33	94	17
June	Closed	14	10	0	0	144	156	0	0	159	278	0	0
	Open	29	25	29	15	56	182	87	18	42	194	124	23
July	Closed	3	13	7	0	3	32	2	6	15	53	6	6
	Open	35	30	11	12	32	20	5	33	57	35	12	9
Aug	Closed	0	0	2	0	0	0	0	0	0	0	0	0
	Open	23	6	9	4	1	2	1	3	5	2	0	0
Sept	Closed	0	0	0	1	0	0	1	0	0	0	0	0
	Open	12	4	0	8	0	1	0	1	0	4	0	2
Oct	Closed	0	7	6	7	0	9	0	16	1	30	2	68
	Open	9	25	12	5	0	0	0	7	0	1	0	131
Nov	Closed	7	10	2	5	7	14	1	0	6	20	0	15
	Open	5	11	9	3	0	11	1	9	7	33	1	9
Dec	Closed	10	1	2	1	22	3	1	2	39	0	0	9
	Open	10	16	15	1	14	4	5	10	11	6	45	16
Total		234	232	243	229	311	502	221	352	404	807	387	382

Source: 2002 HMS SAFE Report.

Table 5. Number of BFT Kept and Discarded Inside and Outside of the June Closed Area, Northeast/Mid-Atlantic Bight, year-round.

	Closed area				Open area			
	1997	1998	1999	2000	1997	1998	1999	2000
BFT kept	35	42	20	14	199	190	223	215
BFT discarded	402	597	35	122	313	712	573	612

Source: 2002 HMS SAFE Report.

Table 6. Calculations of BFT Landings and Discards under Various Alternatives to Modify Target Catch Requirements. Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line.

Alt.	Area and Time	Avg. # of trips	% of trips that meet target catch reqts.	% of obs. trips that catch 1 BFT	% of obs. trips that catch 2 BFT	% of obs. trips that catch 3 BFT	# of BFT caught	# of trips that could land BFT	# of BFT that could be landed	# of BFT discarded	% change in discards from Status Quo
Stat. Quo	North	655 (818)	20.0 (16.2)	20.2				26 (27)			
	North	655 (818)	5.9 (4.7)		13.6			5 (5)			
	North	655 (818)	3.9 (3.1)			8.6		2 (2)			
	North Total						277 (346)		33 (34)	244 (312)	N/A
	South Jan - April	631 (576)	70.6 (71.0)	20.2	N/A	N/A		90 (83)			
	South May - Dec	1186	50.3 (50.8)	20.2	N/A	N/A		121 (111)			
	South Total						770 (701)		211 (194)	559 (507)	N/A
	Coast-wide Total						1047		244 (228)	803 (819)	N/A (+ 2.0)

Table 6. Calculations of BFT Landings and Discards under Various Alternatives to Modify Target Catch Requirements (Continued). Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line.

Alt.	Area and Time	Avg. # of trips	% of trips that meet target catch reqts.	% of obs. trips that catch 1 BFT	% of obs. trips that catch 2 BFT	% of obs. trips that catch 3 BFT	# of BFT caught	# of trips that could land BFT	# of BFT that could be landed	# of BFT discarded	% change in discards from Status Quo
Alt. 2	North	655 (818)	54.1 (50.9)	20.2			277 (346)	72 (84)	72 (84)	205 (262)	- 16.0 % (N/A)
	South		Same as	Status	Quo		770 (701)		211 (194)	559 (507)	0.0 % (N/A)
	Coast-wide Total						1047		283 (278)	764 (769)	- 4.9 % (- 4.2 %)
Alt. 3	North	655 (818)	54.1 (50.9)	20.2				72 (84)			
	North	655 (818)	34.7 (30.3)		13.6			31 (34)			
	North Total						277 (346)		103 (118)	174 (228)	- 28.6 % (N/A)
	South		Same as	Status	Quo		770 (701)		211 (194)	559 (507)	0.0 % (N/A)
	Coast-wide Total						1047		314 (312)	733 (735)	- 8.7 % (- 8.5 %)

Table 6. Calculations of BFT Landings and Discards under Various Alternatives to Modify Target Catch Requirements (Continued). Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line.

Alt.	Area and Time	Avg. # of trips	% of trips that meet target catch reqts.	% of obs. trips that catch 1 BFT	% of obs. trips that catch 2 BFT	% of obs. trips that catch 3 BFT	# of BFT caught	# of trips that could land BFT	# of BFT that could be landed	# of BFT discarded	% change in discards from Status Quo
Alt. 4	North		Same as	Alt. 3			277 (346)		103 (118)	174 (228)	-28.6 % (N/A)
	South		Same as	Status Quo	for one	fish		211 (194)			
	South	1817 (1653)	26.5 (27.8)		13.6			65 (62)			
Total	South						770 (701)		276 (256)	494 (445)	- 11.6 % (N/A)
Total	Coast-wide						1047		379 (374)	668 (673)	-16.8 % (-16.2 %)
Alt. 5 (Pref. Alt.)	North	655 (818)	72.4 (70.6)	20.2				96 (117)			
	North	655 (818)	34.7 (30.3)		13.6			31 (34)			
	North	655 (818)	3.9 (3.1)			8.6		2 (2)			
Total	North						277 (346)		129 (153)	148 (193)	- 39.3 % (N/A)
	South	1817 (1653)	65.7	20.2				241 (220)			
	South	1817 (1653)	26.5		13.6			65 (62)			
	South	1817 (1653)				8.6		2 (2)			
Total	South						770 (701)		308 (284)	462 (417)	- 17.3 % (N/A)
Total	Coast-wide						1047		437 (437)	610 (610)	- 24.0 % (-25.5 %)

Table 6. Calculations of BFT Landings and Discards under Various Alternatives to Modify Target Catch Requirements (Continued).

Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line.

Alt.	Area and Time	Avg. # of trips	% of trips that meet target catch reqts.	% of obs. trips that catch 1 BFT	% of obs. trips that catch 2 BFT	% of obs. trips that catch 3 BFT	# of BFT caught	# of trips that could land BFT	# of BFT that could be landed	# of BFT discarded	% change in discards from Status Quo
Alt. 6	North	655 (818)	79.6 (79.0)	20.2				105 (131)			
	North	655 (818)	34.7 (30.3)		13.6			31 (34)			
	North Total						277 (346)		136 (165)	141 (181)	- 42.4 % (N/A)
	South	1817 (1653)	71.8 (71.7)	20.2				264 (239)			
	South	1817 (1653)	26.5 (27.8)		13.6			65 (62)			
	South Total						770 (701)		329 (301)	441 (400)	- 21.1 % (N/A)
	Coast-wide Total						1047		465 (466)	582 (581)	- 27.5 % (27.5 %)

Table 7. Longline BFT Quotas under Various Alternatives, in Metric Tons

Area	Under Status Quo	Under Preferred Alternative
North	23.7 (21.1 %)	44.9 (40.0 %)
South	88.6 (78.9 %)	67.4 (60.0 %)
Total	112.3 (8.1 % of U.S. quota)	112.3 (8.1 % of U.S. quota)

Table 8. Summary of BFT Estimated to be Landed under Various Alternatives to Modify Target Catch Requirements. Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line (Include SC and GA in Northern Area).

Alternative	Area	BFT Landed	Metric Tons	% Change from Status Quo (Actual 2000 Landings)	Within Current Quotas?	Within Quotas under Pref. Alt.?
No Action/ Status Quo (Actual Landings from 2000)	North	56 (58)	11.6 (12.1)	N/A	N/A	N/A
	South	211 (209)	51.4 (50.9)	N/A	N/A	N/A
	Total	267 (267)	63.0 (63.0)	N/A	N/A	N/A
No Action/ Status Quo (estimated)	North	33 (34)	6.8 (7.0)	-41.9 % (-42.1 %)	yes (yes)	yes (yes)
	South	211 (194)	51.4 (47.3)	0.0 % (-7.0 %)	yes (yes)	yes (yes)
	Total	244 (228)	58.2 (54.0)	-7.6 % (-14.2 %)	yes (yes)	yes (yes)
Alternative 2	North	72 (84)	14.9 (17.4)	28.4 % (43.8 %)	yes (yes)	yes (yes)
	South	211 (194)	51.4 (47.3)	0.0 % (-7.0 %)	yes (yes)	yes (yes)
	Total	283 (278)	66.3 (64.7)	5.2 % (2.7 %)	yes (yes)	yes (yes)
Alternative 3	North	103 (118)	21.3 (24.4)	83.6 % (101.7 %)	yes (no)	yes (yes)
	South	211 (194)	51.4 (47.3)	0.0 % (-7.0 %)	yes (yes)	yes (yes)
	Total	314 (312)	72.7 (71.7)	15.4 % (13.8)	yes (yes)	yes (yes)
Alternative 4	North	103 (118)	21.3 (24.4)	83.6 % (101.7 %)	yes (no)	yes (yes)
	South	277 (256)	67.5 (62.4)	31.3 % (22.6 %)	yes (yes)	yes (yes)
	Total	379 (374)	88.8 (86.8)	41.0 % (37.8 %)	yes (yes)	yes (yes)
Alternative 5 (Preferred Alternative)	North	129 (153)	26.7 (31.6)	126.7 % (163.6 %)	no (no)	yes (yes)
	South	308 (284)	74.0 (69.1)	44.9 % (26.1 %)	yes (yes)	yes (yes)
	Total	437 (437)	100.7 (100.7)	60.0 % (60 %)	yes (yes)	yes (yes)
Alternative 6	North	136 (165)	28.1 (34.8)	142.2 % (187.6 %)	no (no)	yes (no)
	South	329 (301)	80.1 (73.6)	55.8 % (44.6 %)	yes (yes)	no (yes)
	Total	465 (466)	108.2 (108.4)	71.7 % (72.1 %)	yes (yes)	yes (yes)

Table 9. Summary of Revenues from BFT Retention under Various Alternatives to Modify Target Catch Requirements. Figures in Parentheses are for the Preferred Alternative to Move the North/South Division Line (Include SC and GA in Northern Area).

Alternative	Area	Revenues from BFT	% Change from Status Quo (Actual 2000 Landings)
No Action/Status Quo (Actual Landings from 2000)	North	\$142,188 (148,041)	N/A
	South	\$601,710 (595,857)	N/A
	Total	\$743,898 (743,898)	N/A
No Action/Status Quo (estimated)	North	\$83,352 (85,803)	- 41.4 % (- 42.0 %)
	South	\$601,710 (553,714)	0.0 % (- 7.1 %)
	Total	\$685,062 (639,517)	- 7.9 % (- 14.0 %)
Alternative 2	North	\$182,638 (213,282)	28.4 % (44.1 %)
	South	\$601,710 (553,714)	0.0 % (- 7.1 %)
	Total	\$784,348 (766,996)	5.4 % (3.1 %)
Alternative 3	North	\$261,086 (299,085)	83.6 % (102.0 %)
	South	\$601,710 (553,714)	0.0 % (- 7.1 %)
	Total	\$862,797 (852,799)	16.0 % (14.6 %)
Alternative 4	North	\$261,086 (299,085)	83.6 % (102.0 %)
	South	\$790,184 (730,481)	31.3 % (22.6 %)
	Total	\$1,051,270 (1,029,566)	41.3 % (38.4 %)
Alternative 5 (Preferred Alternative)	North	\$322,374 (391,017)	126.7 % (164.1 %)
	South	\$872,129 (806,573)	44.9 % (35.4 %)
	Total	\$1,194,503 (1,197,589)	60.6 % (61.0 %)
Alternative 6	North	\$344,438 (426,564)	142.2 % (188.1 %)
	South	\$937,685 (861,593)	55.8 % (44.6 %)
	Total	\$1,282,123 (1,288,157)	72.4 % (73.2 %)

Table 10. Analysis of Logbook Data Summarizing Number of Hooks Set per Year for Northern and Southern Longline Areas (Divided at 31° N Latitude), 1999-2001.

Year	Area	Number of Hooks Set	% of TOTAL Hooks Set
1999	North	2,946,228	37.29
	South	4,955,561	62.71
	TOTAL	7,901,789	100.00
2000	North	2,959,016	37.10
	South	5,016,513	62.90
	TOTAL	7,975,529	100.00
2001	North	3,016,324	39.88
	South	4,547,627	60.12
	TOTAL	7,563,951	100.00

Table 11. Summary of Net Economic Benefits and Costs for Each Alternative (other than the Status Quo) Considered to Modify Target Catch Requirements.

Alternative	Estimated Net Economic Benefits	Estimated Net Economic Costs
No Action/Status Quo	None	None
Alternative 2	Revenues from BFT could increase by about 3 - 5 percent in the pelagic longline fishery	None. As BFT catch is incidental to longline operations, no additional costs should be incurred by vessels if they are allowed to retain additional BFT.
Alternative 3	Revenues from BFT could increase by about 14 - 16 percent in the pelagic longline fishery	Same as Alternative 2
Alternative 4	Revenues from BFT could increase by about 38 - 41 percent in the pelagic longline fishery	Same as Alternative 2
Alternative 5 (Preferred Alternative)	Revenues from BFT could increase by about 61 percent in the pelagic longline fishery	Same as Alternative 2
Alternative 6	Revenues from BFT could increase by about 73 percent in the pelagic longline fishery	Same as Alternative 2

Table 12. Impacts on Revenues for Individual Vessels resulting from the Various Alternatives to Modify Target Catch Requirements (Include South Carolina and Georgia in Northern Area).

Alternative	Vessel Type	Number of Vessels	Avg. Gross Revenue per vessel	Change in Avg. Gross Revenues per vessel	% Change in Avg. Gross Revenues per vessel
No Action/ Status Quo	North 2 BFT/trip	6	172,000	N/A	N/A
	North ≤ 1BFT/Trip	96 (98)	172,000	N/A	N/A
	South	131 (129)	172,000	N/A	N/A
Alternative 2	North 2 BFT/trip	6	172,000	- 2,137 (-1,901)	- 1.2 %
	North ≤ 1BFT/Trip	96 (98)	172,000	+ 398 (634)	+ 0.2 %
	South	131 (129)	172,000	no change (- 261)	no change
Alternative 3	North 2 BFT/trip	6	172,000	+ 1,168 (1463)	+ 0.7 %
	North ≤ 1BFT/Trip	96 (98)	172,000	+ 1,168 (1,463)	+ 0.7 %
	South	131 (129)	172,000	no change (- 261)	no change
Alternative 4	North 2 BFT/trip	6	172,000	+ 1,168 (1,463)	+ 0.7 %
	North ≤ 1BFT/Trip	96 (98)	172,000	+ 1,168 (1,463)	+ 0.7 %
	South	131 (129)	172,000	+ 1,415 (1,040)	+ 0.8 %
Alternative 5 (Preferred Alternative)	North 2 BFT/trip	6	172,000	+ 1,765 (2,267)	+ 1.2 %
	North ≤ 1BFT/Trip	96 (98)	172,000	+ 1,765 (2,267)	+ 1.2 %
	South	131 (129)	172,000	+ 2,068 (1,614)	+ 1.5 %
Alternative 6	North 2 BFT/trip	6	172,000	+ 1,988 (2,608)	+ 1.2 %
	North ≤ 1BFT/Trip	96 (98)	172,000	+ 1,988 (2,608)	+ 1.2 %
	South	131 (129)	172,000	+ 2,568 (2,034)	+ 1.5 %

15.0 Figures

Figure 1. Time/area Closure Adopted in HMS FMP to Reduce Discards of BFT in the Pelagic Longline Fishery.

(508 Compliance Language: This figure shows a map of the eastern seaboard of the United States extending from New England to Florida. The time/area closure to reduce discards is illustrated by a rectangle extending off of the Mid-Atlantic States into the Mid-Atlantic bight.)

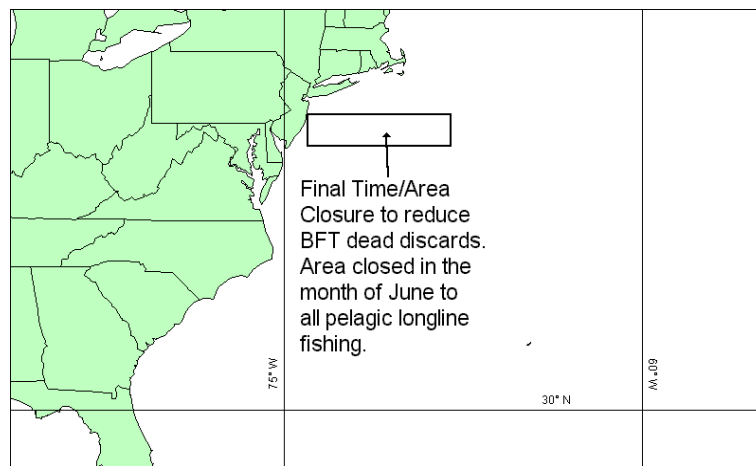
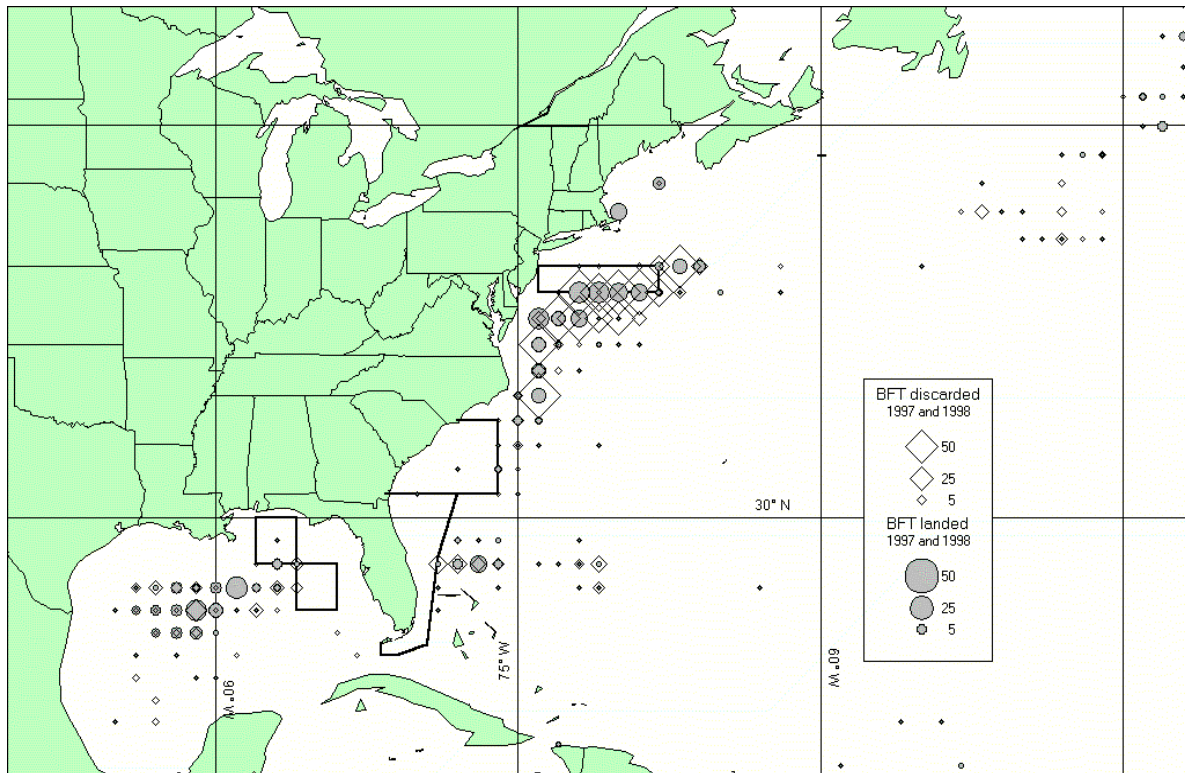


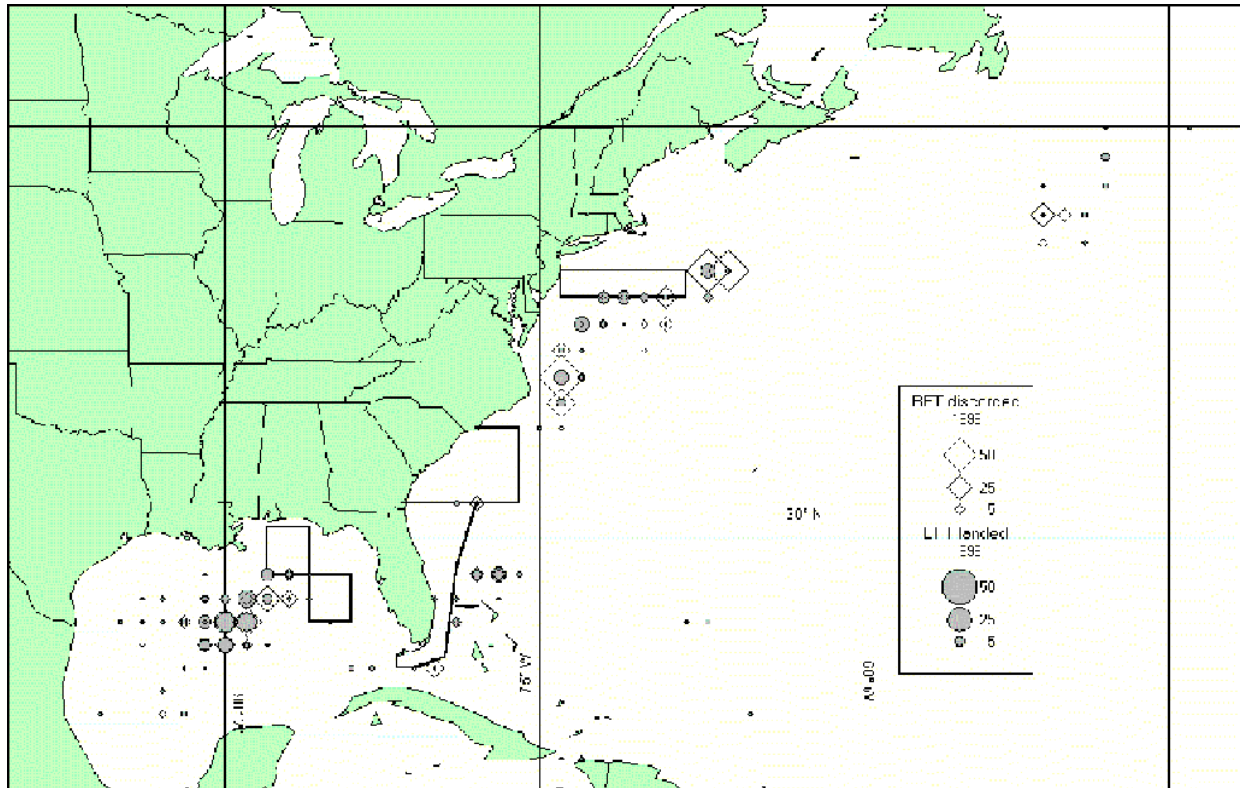
Figure 2. Location of BFT Discarded/Kept by Pelagic Longline Vessels, 1997-1998. Source: SEFSC Pelagic Logbook Reports.



Note: Because of the manner in which this image was produced, the circles and diamonds showing BFT discarded and kept appear along the lower edge of the area in which they were caught/discarded. For example, the circles and diamonds along the lower edge of the mid-Atlantic closed area occurred in the closed area, but are shown along the bottom edge of the area in which they were taken.

(508 Compliance Language: This figure shows a map of the eastern seaboard of North America and the Caribbean. Triangles and Circles illustrating BFT discarded and landed, respectively, are distributed throughout the map and particularly clustered off the mid-Atlantic coast of the United States and within the Gulf of Mexico.)

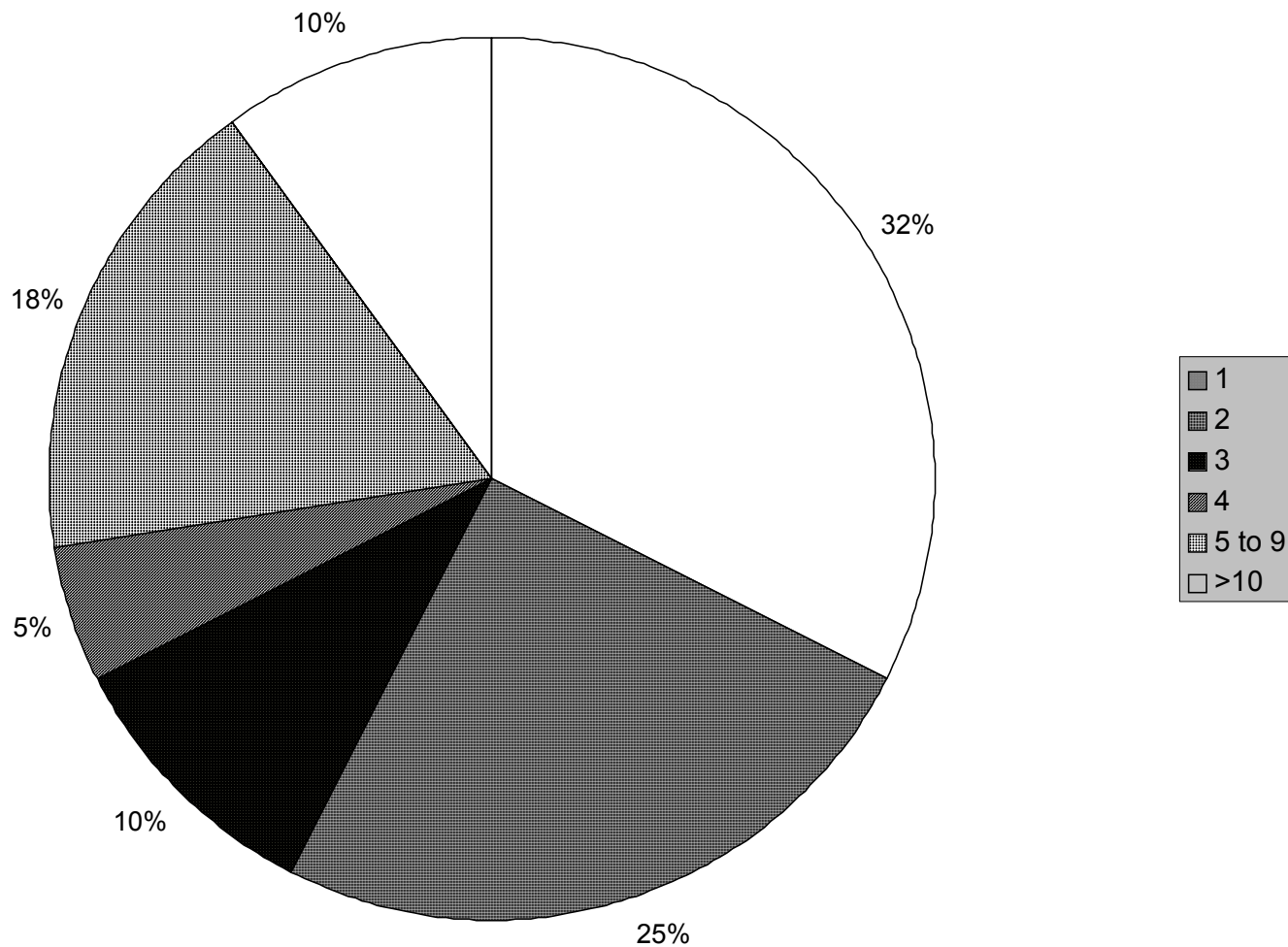
Figure 3. Location of BFT Discarded/Kept by Pelagic Longline Vessels, 1999. Source: SEFSC Pelagic Logbook Reports.



Note: Because of the manner in which this image was produced, the circles and diamonds showing BFT discarded and kept appear along the lower edge of the area in which they were caught/discarded. For example, the circles and diamonds along the lower edge of the mid-Atlantic closed area occurred in the closed area, but are shown along the bottom edge of the area in which they were taken.

(508 Compliance Language: This figure shows a map of the eastern seaboard of North America and the Carribean. Triangles and Circles illustrating BFT discarded and landed, respectively, are distributed throughout the map. Density of clusters off of the mid-Atlantic coast of the United States and within the Gulf of Mexico are less than observed in Figure 2.)

Figure 4. Numbers of BFT Caught on Observed Trips During Which at least One Bluefin Tuna was Caught, 1998-2000, All Areas



(508 Compliance Language: This Pie chart is divided into six segments. 32% of the chart represents 1 BFT caught on observed trips, 25% for 2 BFT, 10% for 3 BFT, 5 % for 4 BFT, 18% 5 to 9 BFT, and 10% greater than 10 BFT.)

Appendices

Appendix 1: HMS and Billfish Advisory (AP) Panel Discussion of the Longline Incidental BFT Catch Limits - Joint Meeting of the HMS and Billfish APs, April 2-4, 2001

Much of the AP discussion focused on two different options brought to the AP by Bluewater Fisherman's Association (BWFA). Specifically the options suggested by BWFA were: (1) adjust the northern sub category from 2% of landed target catch to 10-12% of landed target catch OR 1 fish in order to reflect recent trends or (2) provide for the NMFS' Administrator to adjust the inseason- either subcategory or landing - requirements. Option one would allow a fishing vessel that brings in 4,000 lbs. of target fish to land a 400 lb. BFT. During the discussion it was noted that the current 2% limit does not equate to 1 fish; this forces many vessels to discard a dead BFT. AP members considered adding a cap, such as 2 or 3 BFT per trip, to this option to ensure that the 10-12% doesn't allow for a directed BFT in the pelagic longline fishery especially regarding the larger Grand Banks vessels. Other AP members considered changing the option to one where 3,000 or 3,500 lbs. of target catch has to be landed in order to land 1 BFT. Several AP members noted that setting this 3,000-3,500 lb. limit would allow large coastal shark fishermen, who have a 4,000 lb. trip limit of large coastal sharks, to land BFT. Other AP members supported a 1 fish per trip limit, regardless of the amount of target catch landed.

Other AP comments included:

- Do not move the north/south line. But if you have to - move it south. If you move it north, it will be problematic because that is where the effort is.
- Because the Gulf of Mexico is a spawning area, the situation in the Gulf of Mexico and Atlantic differs and should be treated differently. In the north, the regulations are part of an allocation scheme; in the south the regulations are due to ICCAT recommendations.
- Most longline sets do not catch more than 2 BFT. Disaster sets that catch more are extremely rare.
- The BFT spawning stock is in trouble and the encounter rate, and thus mortality rate, with pelagic longline has not decreased in the Gulf of Mexico.
- If NMFS switches to 1 fish per vessel, it is likely that smaller vessels would start highgrading on BFT.
- This fishery is under a limited access program and ICCAT recommendations and rebuilding plan so it is unlikely that a directed fishery will develop.
- Any bycatch allowance based on weight is difficult to enforce. NMFS should use unit counts instead.
- Economics does not support the idea that fishermen would develop a directed fishery in order to target 1 fish.
- Why would pelagic longline fishermen be more likely than anyone else to highgrade?
- NMFS needs to define where spawning sites may be outside of the Gulf of Mexico.
- The only way to enforce catch limits is on the dock, not at sea.
- Define incidental catch as 12% of the directed target catch, up to a maximum of 3 BFT, with a minimum of 3500 lbs. of directed catch on board per fish.
- Define as above, but with a minimum of 3000 lbs. directed per fish.
- NMFS Enforcement staff stated that the threshold limit is not a problem as long as number of fish (BFT), which is more enforceable than percent by weight, is the measure.

- The main point is to ensure that there is a significant directed, non-BFT catch associated with any landed BFT to ensure trips aren't directed at BFT.
- NMFS must evaluate the impacts of any proposal to go to numbers of BFT vs. 2% of catch.
- Will this allowance result in high-grading of BFT that are kept for landing? Not in the pelagic longline fishery since vessels would not likely take the time and effort to sort through the hold to remove smaller BFT if they catch a larger one.
- Several individuals commented that few boats ever take more than 2 BFT anyway, only likely to happen on Grand Banks trips; 90% of vessels would take less than 2 BFT.
- There was discussion that in the best of worlds technology would be available to allow use of water temperature to define closed areas. Possibly this will happen at some point.

Appendix 2: HMS and Billfish Advisory (AP) Panel Discussion of the Longline Incidental BFT Catch Limits - Joint Meeting of the HMS and Billfish APs, April 1-3, 2002

At the AP Meeting in April 2002 NMFS HMS presented the results and findings from several analyses triggered by ideas presented from the previous AP meeting as well as ongoing investigations into how best to modify the current rule on longline target catch requirements for retention of BFT. Generally comments were supportive of the analyses and encouraged NMFS HMS to proceed with rulemaking. Some of the comments and questions raised by AP members included:

- When you say that the status quo is off by 40 percent, does that mean we are 40 percent behind before we start?
- It makes more sense to move the line to 31 degrees because it would be a better opportunity for law enforcement in a clear area where people are not crossing the line between fishing and landing
- The regulations went from two BFT to one in order to get Japanese BFT fishery out of the Gulf of Mexico. Whatever NMFS does, you have to be careful to avoid any perception of a directed fishery.
- The area in the Gulf of Mexico is a spawning ground. Currently there is a fishery on the spawning ground. This area is critical for stock recovery. NMFS needs to close that area for the three months during the BFT spawning season.
- The spawning area is never in the same place in the Gulf of Mexico. That is why the Japanese longline vessels used to “leapfrog” to keep up with the school.
- The analysis NMFS has just presented appears sound and worth a try. However, NMFS must look into closing the Gulf of Mexico spawning ground.
- The Japanese longline fishery from 1962-82 should have some good data. These data might show the exact location of spawning bluefin.
- Enforcement of such a closure could be an issue because it is so far offshore.
- Does the analysis just presented consider closing the mid-Atlantic Bight? This might be a good option as well.
- The current proposal should not change the level of mortality, just the way the mortality is used.
- Currently any overage in BFT dead discards comes out of other directed quota allowances. NMFS should use the approach just presented to prevent any overage.
- These are all big fish 600 pounds. Is NMFS going to test break away gear?

Appendix 3: HMS and Billfish Advisory (AP) Panel Discussion of the Pelagic Longline Incidental BFT Catch Limits - Joint Meeting of the HMS and Billfish APs, February 10-12, 2003

The AP discussion was primarily focused on the elements of the proposed rule on this subject published on December 24, 2002, (67 FR 78404). The accompanying EA/RIR/IRFA to the proposed rule examined three approaches to address the issue of BFT catch limits associated with pelagic longline operations. Several alternatives to each approach were analyzed in the draft EA/RIR/IRFA and the preferred alternative selected for implementation in the proposed rule. Specifically the preferred alternative for each approach was:

Approach 1: Target Catch Requirement. Preferred alternative: Require 2,000 lbs of other fish landings to retain 1 BFT and 6,000 lbs of other fish landings to retain 2 BFT in ALL areas,

Approach 2: North/South Line Adjustment and Area Quota Adjustment. Preferred Alternative: Move the line to 31°00' N. Latitude (near Jekyll Island, GA) and adjust N/S quota percentages accordingly (30% North and 70% South).

Approach 3: Inseason Adjustment Authority. Preferred alternative: Provide NMFS with the authority to adjust the BFT retention limits for pelagic longline vessels between zero and three BFT per trip and/or adjust the target percentage by 25%.

AP comments were generally supportive of the three approaches and the specific preferred alternatives for each. Specific AP comments included:

- NOAA Fisheries should allow a third tier for catching more BFT based on large trip landings of target catch
- Adjusting target percentage by 25% in the inseason adjustment authority may be too restrictive. Perhaps be raised to 50%. No reason to cap at 3 BFT.
- Support preferred alternative for poundage as the target catch as opposed to 2%.
- Proposal may not go far enough and will still not allow a reasonable opportunity to harvest entire longline quota.
- Consider 40/60 split rather than current 30/70.
- 30/70 split not equitable and was not based upon the best available effort information.
- Northern boat owners may move south (GOM) to get their fair share of the allocation.
- NOAA Fisheries would get better information on effort if the allocation was split 50/50
- Support moving the allocation demarcation line to that outlined in preferred alternative (i.e., 31 degrees 00 minutes latitude) in the proposed rule.
- GOM should be off limits
- Support inseason quota adjustments
- The 30-day notification requirement, prior to changes in regulations, is too long.
- NOAA Fisheries should employ a two-week notice to be timely responding to resource concerns (i.e., harvest/quota projections)..
- NOAA Fisheries should investigate/analyze recent landings from 2001 and 2002.